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THE INFLUENCE OF THE QUESTION FORM  
UPON THE RESPONSE IN A PUBLIC OPINION POLL

ALBERT B. BLANKENSHIP



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THE INFLUENCE OF THE QUESTION FORM  
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ALBERT B. BLANKENSHIP  
HARTWELL, JOBSON & KIBBEE  
NEW YORK CITY

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## 1. INTRODUCTION AND DISCUSSION OF LITERATURE

The public opinion poll has become, in a few short years, a tremendous influence in our national life. Congressmen and other legislators have been forced to take notice of public opinion as revealed by the poll technique. Recently, however, many criticisms have been leveled against the poll, chief among which is the point that the questions are worded in a "leading" or "loaded" manner, so that certain results are bound to occur.<sup>1</sup>

This is a serious charge, and if substantiated, might well throw doubt on all of the work ever done by the poll-takers. In order to determine the degree of importance of the wording of the questions used, the present study was undertaken. It should be pointed out, however, that regardless of the present results, a similar study would have to be made on a nationwide basis, covering many national issues, before any conclusions concerning the nationwide polls could be drawn. Despite such an obvious limitation, nevertheless, the present study, made in one town, should be indicative.

This study was designed to answer the following problems:

1. Does the question form (i.e. the wording) influence the results secured?
2. What question form (among five used) best predicts election returns?
3. What question form shows highest consistency of response among two samples of voters?
4. Which form of wording shows least influence of suggestion upon those answering?
5. Which wording produces the fewest "don't know" responses? (See page 389 as to why such a measure might be important.)
6. Does any effect of wording have a carryover influence upon the next question asked? What is such an effect in terms of suggestion, consistency, and indecision (the proportion of "don't know" answers)?
7. What question form may be considered best in the present study?

Before a detailed discussion of the problem, and the method

<sup>1</sup>Cf. for example, Spingarn (13), or Studenski (14).

used in attacking it, are presented, a background of related work performed in the field will aid in understanding the problem and seeing how other investigators have attempted to solve it.

Psychologists have been using formalized questionnaire techniques since the time of Galton.<sup>2</sup> The work that psychologists performed in the field of questionnaire investigation was at first largely limited to introspective reports of subjects in the laboratory situation, such as Galton's work in the field of imagery. Soon the questionnaire method was borrowed by other psychologists for use in the field of memory work. From this it was a short step to the application of memory questionnaires not only for the clinical psychologists to use in the recording of case histories, but also to the specific field of testing. Trade tests, for example, are almost entirely a matter of questions which require the subject to record things he has learned and remembered.

It is only recently that the questionnaire technique has been used in the field of attitude measurement. Thurstone<sup>3</sup> was one of the earliest to use this approach, but his work was rapidly followed by that of other psychologists. The same method has been applied to the measurement of group opinion, such as employee morale<sup>4</sup> and public opinion in general.

The use of the attitude questionnaire in the field of public opinion was a gradual development that evolved naturally from the introspective reports of the psychological laboratory. The laboratory subjects reported their feelings and attitudes during the course of an introspective experiment. It was not long before the "consumer jury" was used,<sup>5</sup> wherein the reactions of a particular constant group<sup>6</sup> of persons are recorded for purposes of

<sup>2</sup> F. Galton. *Inquires into Human Faculty and Its Development*. London: J. M. Dent & Co., 1883.

<sup>3</sup> L. I. Thurstone and E. J. Chave. *The Measurement of Attitude*. Chicago: Chicago University Press, 1929.

<sup>4</sup> Cf. A. B. Blankenship. *The Measurement of Industrial Morale*. In *The Psychology of Industrial Conflict*. New York: Society for the Psychological Study of Social Issues, 1939 (in press).

<sup>5</sup> Cf. E. K. Strong. *Relative Merits of Advertisements*. *Arch. Psychol.*, 1911, No. 17.

<sup>6</sup> A "consumer jury" is a particular group of people who agree to act as respondents on a number of subjects and studies, and the sample studied always consists of this one identical group.

evaluating advertising, or a particular product. This, actually, was one of the earliest attempts to measure public opinion. However, those in the field of product and advertising evaluation realized the limitations of this method, so a wider sample of persons was used, and this was the beginning of the now common method of measuring public opinion. Closely related to this, of course, is the market survey, in which the manufacturer or other agent secures the reaction of a large number of people to products, policies, advertising, etc.

Periodic consumer opinion polls, based on careful sampling techniques, became more common in the early 1930's, with the work of the Psychological Corporation, the American Institute of Public Opinion (Gallup), and the Fortune Surveys (Roper).

The influence of the question form has already been studied by psychologists and others. Most of this experimentation has been in the field of the memory question, and this work has centered in the specific fields of law, education (tests), market research, and employment psychology. Probably the earliest record of the influence of the question form in any field was that made by Socrates, in his emphasis on the proper wording of questions to guide learning. But it is unnecessary for the purposes of this paper to summarize the results of the experiments and observations on the influence of the question form in the field of education or memory, for such results can scarcely be generalized to extend over to the field of attitudes.<sup>7</sup>

<sup>7</sup> For references to the influence of the question form in the field of law, cf. Burtt, H. E. *Legal Psychology*. New York: Prentice-Hall, 1931. Pp. xiv + 467. Burtt, H. E., & Gaskill, H. V. Suggestibility and the form of the question. *J. Appl. Psychol.*, 1932, 16, 358-373. Cady, H. M. On the psychology of testimony. *Amer. J. Psychol.*, 1924, 35, 110-112. Marston, W. M. Studies in testimony. *J. Amer. Inst. Crim. Law*, 1924, 15, 5-31. Morgan, C. S. A study of the psychology of testimony. *J. Crim. Law & Criminol.*, 1917, 8, 222-232. Whipple, G. M. Psychology of testimony and report. *Psychol. Bull.*, 1912, 9, 264-268.

In the field of education and testing, cf. Franken, A. *Aussageversuche nach der Methode der Entscheidungs- und Bestimmungsfrage bei Erwachsenen und Kindern*. *Zsch. f. angew. Psychol.*, 1912, 6, 174-253. Hurd, A. W. Comparisons of short answer and multiple-choice tests covering identical subject content. *J. Educ. Res.*, 1932, 26, 28-30. Kinney, L. B., & Eurich, A. C. A summary of investigations comparing different types of

In attitude measurement there are primarily three fields all closely related to one another—attitude scales, interest questionnaires, and public opinion polls—in which experimentation on the effect of the question form has been attempted. The attitude scale, a technique generally applied to measurement of individuals, was the first of these to develop, and this was then applied to the measurement of interests, also largely with individuals rather than with groups. Then came the field of the political and social poll, which was different from the attitude scale not only because it concerned the measurement of a large number of individuals, but also because it concerned the use of a large number of interviewers. These three fields are all closely related enough so that we shall review work on the question form not from a breakdown of the three fields of measurement, but rather according to the type of question variation that has been attempted.

Mathews (8), using an interest questionnaire which was constructed in two forms, where the order of alternatives was varied, observed that with 184 junior high school students, the first item in the answer list was checked consistently by 2—3% more students than when it was last on the list. This makes it apparent that the order of alternatives, though seemingly a small item, must affect the validity of the question. Conceivably in some cases where the alternatives offered to the respondent were very difficult, the tests. *Sch. & Soc.*, 1932, 36, 540-544. Magill, W. H. The influence of the form of the item on the validity of achievement tests. *J. Educ. Psychol.*, 1934, 25, 21-28. Malmud, R. S. The controlled vs. the free completion. *Amer. J. Psychol.*, 1925, 36, 401-411. Remmers, H. H., Marschat, L. E., Brown, A., & Chapman, I. An experimental study in the relative difficulty of the true and false, multiple choice, and incomplete-sentence types of examination questions. *J. Educ. Psychol.*, 1923, 14, 367-372. Ruch, G. M., & Charles, J. W. A comparison of five types of objective tests in elementary psychology. *J. Appl. Psychol.*, 1928, 12, 398-403. Ruch, G. M., & Stoddard, G. D. Comparative reliabilities of five types of objective examinations. *J. Educ. Psychol.*, 1925, 16, 89-103. Shulson, V., & Crawford, C. C. Experimental comparison of true-false and completion tests. *J. Educ. Psychol.*, 1928, 19, 580-583.

In the field of market research cf. Franzen, R. Use of leading questions in consumer interviews. *Market Research*, 1937, 6, No. 3, 19-21. Link, H. C. How to prepare questions for consumer research. *Printers Ink*, Jan. 11, 1934, 37-41. Roslow, S., and Blankenship, A. B. Phrasing the question in consumer research. *J. Appl. Psychol.*, 1939, 23, 612-622.

last item would have an advantage because of recency.

Jenkins (6), in a check-list question<sup>8</sup> (developed after a free-response trial), asked a group of college students to check the outstanding advantages or disadvantages of fraternity life as they had encountered it. When the five most frequently checked items were omitted, even though space was provided for additional answers, the original group that had responded completely displaced these five items in terms of frequency of response.

The Fortune surveys (3) add to our knowledge about the influence of the completeness of the possibilities offered. In the September and October surveys this question was asked: "Which of these courses of action comes closest to describing what you think the U. S. should do?" Then followed a check-list of possibilities. But in October an additional alternative was offered—"Refuse to sell actual war munitions but sell the raw materials that go into the making of war materials to anyone," and this received 6.4% of the answers! The comparison of results for the two months must be made cautiously because of the incompleteness of the possibilities offered in the earlier survey.

If the check-list is exhaustive there appears to be little danger in its use, but if the list is incomplete, we must be careful in the interpretation of results secured. By rephrasing a question somewhat and increasing the list of possibilities, Studenski (14) found great shifts in response.

The usefulness of the check-list depends upon the validity and completeness of the items, and these can be developed properly only through making trial interviews with free response questions to determine the required items.

The Psychological Corporation asked these two questions in a gasoline study (12): "What do you think are the most important qualities about a gasoline?" (free response). "Which of the following qualities of a gasoline do you regard as important?" (then followed a list of items). Although there were, of course, many more answers given in the case of the check-list, the rank order correlation of the results obtained was .93, indicating very little difference in rank for the answers secured. A complete check-list is a good measuring tool for attitudes. We

<sup>8</sup> A list of alternatives offered to the respondent.

can see that changing the *order* and the *number* of items in the check-list can change the response.

The positive or negative character of the statements may also affect the responses secured. Wembridge and Means (15) expressed 16 propositions in a positive phrasing and in various forms of the negative, and after having a number of groups vote on these propositions as worded in a clear positive manner (according to Wembridge and Means), they conducted a revote with the negatives. The subjects were all asked to indicate any change in attitude in the interim by making a note in the margin. All of the negatives, it was concluded, showed a high degree of confusion.

Certain words in the question form may arouse the prejudices of the person. The work of Menefee (9) is indicative concerning the effects of emotionally colored words. He drew up 16 statements, answerable by yes—no. Two statements each applied to such categories as "conservatism," "fascism," etc. The statements, without identifying labels, were presented to 742 subjects, who, 28 days later, repeated their responses, when each item was presented under its appropriate label. Some of the questions showed a definite difference in response, while others did not. Menefee concluded that some of the terms had an effect upon the expressed attitudes.

Raskin and Cook (10) found that although individuals show a high extent of agreement with fascist principles when not labeled as such, they will, nevertheless, disagree with the statement that "Fascism is the form of government most capable of solving our national problems." However, a person may agree with all of the expressed elements of a particular thing and yet not like the thing as a whole, if only because not all of the elements have been presented to him.

Hartmann's work (4) also investigates the effect of appeal to prejudice. He used 20 statements so that 10 measured "pure" conservatism, and 10 "pure" liberalism. Twenty-two party names, as well as the statements, were ranked by 168 voters in a rural Pennsylvania community, by means of personal interview. It was found that there was a clear and definite distinction between what people want and the political channels through which they seek

it. The party names color the response, and we may conclude that the responses to the individual statements would certainly have been different if the party names had been connected to them. Again, however, the general term (the party name) stands for considerably more than any 20 statements could cover.

The Psychological Corporation also has an example of how an appeal to prejudice can change the response (12). By splitting a nationwide sample of respondents into two comparable groups, the Corporation was able to ask one question in two ways: "Do you like the idea of having Thanksgiving a week earlier this year?" "Do you like President Roosevelt's idea of having Thanksgiving a week earlier this year?" The mere addition of Roosevelt's name to the question caused an additional 5% affirmative answers.

Studenski (14) has found that certain words also may act as an appeal to prejudice, and thus affect the responses secured. The term "government spending" had such an unfavorable connotation that only 21% of his group of 150 college students were in favor of continued government spending when the question was phrased: "To increase prosperity, should government spending be decreased, continued at the present rate, or increased?" The rephrased question: "To increase prosperity should the following government expenditures be decreased, increased, or continued as they are: those for relief; those for work on government projects; those for national defense; those for schools, police, etc.?" showed no unqualified opposition to government expenditures or to increasing them. Of course in this case we have a specification of spending, which according to Studenski undoubtedly operates to change the results, but the term "government spending," he argues, also has an unfavorable connotation.

Similarly Studenski reworded the question: "Should every worker be forced to join a union?" to read: "Is it proper for a union to require all wage earners in an industrial enterprise to join the union (a) under any circumstances, (b) when the union controls a majority of the employees, (c) when it controls a minority of the employees; or is it improper under any circumstances?" Here the proportion entirely opposed to unionization dropped from 88.9% in the first wording to 45.0% in the second.



Studenski concludes that the first wording suggests compulsory enrollment rather than free choice, in addition to the fact that no qualification of response was permitted. Several other similar examples are presented in Studenski's work.

We have ample evidence here that certain words can color the question so as to change the response, and in the work of Studenski we also have a suggestion that the phrasing or limitation of the alternatives offered can further influence the results. Houser (5) offers further evidence on this latter point. He asked: "Is the service at Blank's reasonably good?" "Is the service at Blank's all you could expect?" The latter question produced 40% fewer affirmative answers, showing that by making the wording indicate a higher degree of favor toward Blank's, fewer "yes" answers can be expected. The Psychological Corporation has evidence (11) which substantiates this finding. When a question was worded: "Are you willing to have an increase in prices with the hope that it will bring back prosperity?" 70% of the replies were affirmative, while an additional 11% affirmative replies were received when the question was worded: "Are you willing to have a reasonable increase in prices with the hope that it will bring back prosperity?"

The addition of the word "you" in a statement has been found to influence responses in a simple recall situation,<sup>9</sup> but no work has been performed in the field of attitude measurement with this variable. We have only the unsupported remark of Droba (2) that the personal question form (containing the word "you") is more accurate than the impersonal form.

The summary of work that has already been done upon wording of the question in the measurement of attitudes indicates that the following variables might well be important in influencing the results secured: the order of the alternatives offered, the number of the alternatives offered, positive versus negative statements, an appeal to prejudice by the use of particular words which color the response, the degree of alternatives offered, and the personal versus the impersonal question.

However, many of these changes involve variations in the

<sup>9</sup> Cf. Muscio, *op. cit.*, and Burr and Gaskill, *op. cit.*



*topic* of the question. But results secured where the topic is a constant, and the *form* alone is varied, suggest that question form itself may be an important variable. For that reason, the present study was undertaken to determine the influence of question form upon the responses secured.

The next chapter will discuss this point somewhat more fully, and will, in addition, show specifically what variables were included in the present study, and will outline the general technique used in the investigation.

## II. THE METHOD

As already stated in Chapter I, the purpose of this study was to observe and interpret results of a public opinion poll of one town, when the form of the questions was varied. *Form*, as defined here, refers to minimal changes in wording which do not actually involve a change in the subject matter or *topic* of the question. It was believed that these *form* variations would be of more value than *topic* variations for purposes of this study, since form variations are not commonly assumed to change the results secured, while topic variations are clearly recognized as a variable which can be expected to change the results.

After a consideration of the possible variables presented in the review of the literature, it was decided to limit the variations to include six possible comparisons.

In deciding upon the form variations to be included, only wordings which might be used by polling agencies were included:<sup>10</sup>

1. The "objective" question. This can be defined as a question containing both phrasings—positive and negative—within the question form, and not containing the word "you."
2. The "subjective" question. This is a question containing both phrasings within the question itself, and containing the word "you."
3. The "positive" question, which contains only the positive phrasing within the question wording itself.

<sup>10</sup> For example, such a question as "You do believe in our present national administration, don't you?" would never be asked in a poll in any country except those where dictatorships flourish. It should be pointed out that all of the terms referring to the question-forms are simply arbitrary names assigned by the present writer.

4. The "negative" question, which contains only the negative phrasing within the question wording itself.
5. The check-list question, which contains all possibilities of answer in a list read to the respondent immediately following the question.
6. The free-response question, which contains no such list of possible responses, but allows the respondent to reply in his own words.

These variables can be included by asking a particular question in five different forms, as was done in the present study:

- a) The objective question
- b) The subjective question
- c) The positive objective question
- d) The positive objective question containing a check-list
- e) The negative objective question

A summary of the wordings of the questions asked with each of these forms follows:

a) *The objective questions*

2. Is the present government helping or hurting business?
4. Is the visit of the British King and Queen to this country desirable or undesirable?
6. Is it desirable to permit or to prohibit horseracing and parimutuel betting in New Jersey?
8. Is it desirable or undesirable to balance the national budget within the next four years?
10. Should the United States continue or should it break off diplomatic relations with Germany?

b) *The subjective questions*

2. Do you feel that the present government is helping or hurting business?
4. Do you think the visit of the British King and Queen to this country is desirable or undesirable?
6. Would you vote for or against the amendment to permit horseracing and parimutuel betting in New Jersey?
8. Would you vote for or against the balancing of the national budget within the next four years?
10. Do you think that the United States should continue or should break off diplomatic relations with Germany?

c) *The positive objective questions*

2. Is the present government helping business?
4. Is the visit of the British King and Queen to this country desirable?

6. Is it desirable to permit horseracing and parimutuel betting in New Jersey?
8. Is it desirable to balance the national budget within the next four years?
10. Should the United States continue diplomatic relations with Germany?

d) *The positive objective question containing a check-list*

2. Is the present government helping business: Yes, No, or Don't Know?
4. Is the visit of the British King and Queen to this country desirable: Yes, No, or Don't Know?
6. Is it desirable to permit horseracing and parimutuel betting in New Jersey: Yes, No, or Don't Know?
8. Is it desirable to balance the national budget within the next four years: Yes, No, or Don't Know?
10. Should the United States continue diplomatic relations with Germany: Yes, No, or Don't Know?

e) *The negative objective questions*

2. Is the present government hurting business?
4. Is the visit of the British King and Queen to this country undesirable?
6. Is it desirable to prohibit horseracing and parimutuel betting in New Jersey?
8. Is it undesirable to balance the national budget within the next four years?
10. Should the United States break off diplomatic relations with Germany?

Since all of these questions were concerned with local, national and international problems, it was decided to include additional questions on similar subjects. It should be stressed that *all* of the question wordings used are essentially similar to those actually used on nationwide poll studies, and no "grotesque" forms have been included. Five questions were asked in constant form (i.e., their form was not varied):

1. Have you refused to buy either Japanese or German goods?
3. Do you favor a third term for President Roosevelt?
5. Do you believe prosperity will increase before the end of 1939?
7. Should the United States cancel foreign war debts?
9. Should the United States supply financial aid to the railroads?

All of the questions, both the variable and standard forms, were decided upon only after a trial survey with 100 individuals in Newark, N. J. It might be added at this point that all of

the data secured in this study were gathered by means of personal interview, which is the common technique in the public opinion poll. Interviewers called from door-to-door (the exact procedure will be described later) and asked lists of questions provided on mimeographed sheets. Before the questions were used for the final study, they were clarified in wording where misunderstandings were evident in the trial interviews. Several questions which elicited a high proportion of "don't know" responses in the trial study were eliminated, since it was felt that questions measuring a more crystallized opinion might be of greater value for this study. In general the simpler questions were placed at the start of the questionnaire, since that is the crucial point which determines whether or not the person interviewed will continue to talk to the interviewer.

It was originally believed that the standard (unchanging) questions would not only act as a standard of comparison of the five groups of people to be interviewed, but that these questions might also act as "buffers" between the variable questions, since it might

— — — — —  
Questionnaire Form

	—1—	—2—	—3—	—4—	—5—
Q. 1	1	1	1	1	1
Q. 2	a	b	c	d	e
Q. 3	3	3	3	3	3
Q. 4	b	c	d	e	a
Q. 5	5	5	5	5	5
Q. 6	c	d	e	a	b
Q. 7	7	7	7	7	7
Q. 8	d	e	a	b	c
Q. 9	9	9	9	9	9
Q.10	e	a	b	c	d

Note: The letters a to e represent variable forms of the question, as previously defined and illustrated in the preceding pages. When the question form is shown by a number, that indicates that this is a constant or standard question in all questionnaires. The actual questions asked can be found in the preceding several pages or in the questionnaires included in the Appendix.

be that there was a carryover from the effect of one variable question to another. These standard questions would aid, then, in keeping the background of each variable question a constant. The questionnaire was therefore constructed in five forms, as shown in the Appendix, which may be summarized as above: [the different forms being indicated by the letters (a, b, c, etc.), with standard questions by the numbers (1, 2, 3, etc.)].

The study was made in Irvington, N. J., between June 10 and 19, 1939. New Jersey was chosen because the state was holding an election on June 20 to determine whether or not the state constitution should be amended to permit horseracing and parimutuel betting. The election returns would allow a comparison of the results secured on each of the five forms of the question asked to determine which showed greatest agreement with the returns, thus permitting a measure of validity of the question forms. Irvington was selected because it was close to New York City, where the writer was located. Furthermore, planning the study for Irvington, and securing statistics concerning its population were simplified by a friend of the writer's who was a resident of the town.

The trial survey in Newark showed that there were differences between registered and non-registered voters on the horseracing and parimutuel betting issue, the registered voters being much more definite in their attitudes than the non-registered group. Since it was desired to have a total sample of at least 1,500 registered voters, a total of 3,000 interviews was secured.<sup>11</sup> For other than the horseracing issue, of course, all of the interviews could be used.

A number of experimental controls had to be exercised, to insure that the intended variables were the only variables. In the first place, the sample of persons interviewed had to be reasonably comparable with the known characteristics of the population of the town. It was also necessary to have the five groups of people interviewed with varying forms of the questionnaire as nearly equivalent as possible, so that differences resulting on the variable questions could be attributed to the form of the question rather than to the peculiar characteristics of one or more of the

<sup>11</sup> The Irvington registration lists indicated that approximately 50% of the adults were registered voters.

samples. And since the five groups of voters were to be compared on the horseracing issue, these five groups also had to be established as comparable.

To establish the equivalence of the groups, therefore, the following information was secured on every interview (as can be seen in the questionnaires included in the Appendix):

Do you or your family own an automobile?  
 Do you or your family have an automatic refrigerator?  
 Do you have your own telephone?  
 What is your religion: Hebrew, Protestant, or Catholic?  
 (If "Protestant") Which church?  
 In what country were you born?

Race: White, Black, Brown, Yellow, Indian  
 Enter by approximate age: Man ..... Woman .....  
 Type house: 1 family; 2 family; Apt.

In addition, it was decided to ask registered voters whether or not they planned to vote in this special election so that only this group could be used for validation (see page 361 as to why only this group was to be used for validation). The date, the street and number, the ward and district, and the economic group<sup>12</sup> were also recorded, for purposes to be described later.

A number of the items mentioned were controlled by instructing the interviewers to cover certain specific groups. For example, the interviewers were each assigned the number of men and number of women to interview daily, and were further instructed how many interviews to make in a particular district. Both of these assignments were on the basis of the number of men and women present in the 1938 registration lists, and the number of persons voting in the 1938 election. Table 1 shows how closely our total sample was distributed in proportion to the votes cast in the

<sup>12</sup> These groups were divided according to the report of the Brookings Institution, 1929, which is commonly used by opinion survey agencies for classification of income levels. "A" group includes those of approximately \$5,000 and over; "B" \$2,000-5,000; "C" \$1,000-2,000; and "D" under \$1,000. These groups were defined in empirical terms to the interviewers, as can be seen by the instruction sheet to interviewers, included in the Appendix.

TABLE 1  
COMPARISON OF INTERVIEWS OBTAINED IN EACH  
ELECTION DISTRICT WITH VOTES CAST IN  
JUNE 1939 SPECIAL ELECTION

Ward and District		Total Sample		Election Returns	
		No.	%	No.	%
1	1	98	3.3	221	3.2
	2	75	2.5	229	3.3
	3	74	2.5	175	2.5
	4	69	2.3	156	2.2
	5	70	2.3	208	3.0
	6	64	2.1	159	2.3
	7	58	1.9	141	2.0
	8	78	2.6	219	3.1
	9	71	2.4	166	2.4
	10	85	2.8	208	3.0
	11	78	2.6	195	2.8
	12	65	2.2	171	2.4
	13	65	2.2	161	2.3
	14	63	2.1	190	2.7
	15	81	2.7	193	2.8
2	1	81	2.7	192	2.7
	2	63	2.1	172	2.5
	3	69	2.3	100	1.4
	4	91	3.0	188	2.7
	5	78	2.6	180	2.6
	6	72	2.4	191	2.7
	7	69	2.3	118	1.7
	8	87	2.9	196	2.8
	9	78	2.6	168	2.4
	10	64	2.1	127	1.8
	11	72	2.4	144	2.1
3	1	72	2.4	148	2.1
	2	65	2.2	162	2.3
	3	78	2.6	190	2.7
	4	84	2.8	166	2.4
	5	61	2.0	137	2.0
	6	70	2.3	139	2.0
	7	66	2.2	131	1.9
	8	79	2.6	184	2.6
	9	60	2.0	122	1.7
	10	71	2.4	169	2.4
	11	65	2.2	167	2.4
	12	76	2.5	135	1.9
	13	78	2.6	202	2.9
	14	72	2.4	157	2.2
	15	85	2.8	216	3.1
Total		3000	99.9	6993	100.0

special election in 1939.<sup>13</sup> It can be seen that the proportion of men and women interviewed is within .2% of the figures secured from analysis of the 1938 voting list (Table 2). One other factor was controlled by assignment of the interviews—economic group. It was predetermined that there were few or no "A" families in Irvington, and "B," "C," and "D" families were located by district on a map of Irvington, and the probable total of each group, district by district, for the entire town was estimated. The total number and percent of each economic group interviewed can be seen in Table 3.

The remaining sampling factors were left to chance, the assumption being that by interviewing every fifth family in a particular district, the samples would tend to be representative of the population. Tables 4 through 22 indicate further sampling characteristics of the entire group of persons interviewed. In none

TABLE 2  
COMPARISON OF PROPORTION OF MEN AND WOMEN  
INTERVIEWED WITH MEN AND WOMEN REGISTERED\*

	Total Sample		Registered	
	No.	%	No.	%
Men	1644	54.8	3822	55.0
Women	1356	45.2	3135	45.0
Total	3000	100.0	6957	100.0

\*The 1938 registration list was completely tabulated by sex in order to secure the number of men and women registered.

<sup>13</sup> The standard error of the difference and the critical ratios have not been determined between our total sample and the actual figures available, primarily because it is not necessary to prove that the sample secured was entirely a representative one, for even if our total sample were biased in one or more directions, that bias would carry through all forms of the interview, and would consequently be a constant for all question forms. Another reason why the figures were not computed is the fact that many of the figures available for the town are not representative of the situation today, having either come from the 1930 Census (which may not be true for 1939), or from sources which can not be checked for accuracy. As a matter of fact, it is reasonable to suppose that on the majority of the sampling information secured, the data revealed in this study are more representative of the town than the only figures now available.



TABLE 3  
ECONOMIC GROUP OF PERSONS INTERVIEWED\*

	Total Sample	
	No.	%
B	422	14.1
C	2492	83.1
D	86	2.9
Total	3000	100.1

\*See page 362 for definitions of these groups.

of these cases is there any attempt to show statistically how close the survey figures are to other figures available for the town. There are three reasons for this: other figures are not available for all sampling characteristics measured; where other figures are available they may be only estimates; and even when Census figures are available, since these are from 1930, they may not be accurate for the present. The proportion of whites and blacks interviewed closely follows the proportions given in the 1930 Census (see Table 4). Our sample was composed of fewer people within the age range of 20-29 than the population at large (Table 5), but even if the Census figures are more representative than the data obtained in the survey, this does not matter since this effect is a constant for all of the interview forms. The countries of birth given by those interviewed are representative of those listed in the 1930 Census (Table 6). The distribution of religions

TABLE 4  
COMPARISON OF RACE DATA OBTAINED ON SAMPLE  
WITH CENSUS FIGURES

	Total Sample		1930 Census	
	No.	%	No.	%
White	2998	99.9	56,598	99.8
Black	2	.1	118	.2
Other			17	*
Total	3000	100.0	56,733	100.0

\*Less than .1%.

TABLE 5  
COMPARISON OF AGE OF PEOPLE INTERVIEWED  
WITH CENSUS FIGURES\*

	Total Sample		1930 Census	
	No.	%	No.	%
20-29	474	15.8	11,644	30.0
30-44	1282	42.7	15,092	38.8
45-64	1071	35.7	9,841	25.3
65-up	163	5.4	2,275	5.9
Age not given	10	.3	10	**
Total	3000	99.9	38,862	100.0

\*The Census figures presented here do not include those persons under 20, since we did not include any persons below voting age in this survey.

\*\*Less than .1%.

obtained is given in Table 7, but there are no Census data comparable here, since the 1920 Census was the last that included an analysis of religions.

Tables 8, 9, 10 and 11 are all further indications of economic

TABLE 6  
COMPARISON OF COUNTRY OF BIRTH OF PEOPLE  
INTERVIEWED WITH 1930 CENSUS FIGURES

	Total Sample		1930 Census	
	No.	%	No.	%
United States	2,281	76.0	43,477	76.6
Germany	232	7.7	4,284	7.6
Poland	80	2.7	1,956	3.5
Britain*	79	2.6	1,629	2.9
Sweden	11	.4	135	.2
Austria	49	1.6	568	1.0
Russia	90	3.0	1,667	2.9
Italy	51	1.7	927	1.6
Hungary	31	1.0	326	.6
Czechoslovakia	13	.4	665	1.2
France	5	.2	145	.2
Other	46	1.5	954	1.7
No Answer	32	1.1		
Total	3000	99.9	56,733	100.0

\*Including England, Scotland, Ireland and Wales.

TABLE 7  
RELIGION OF PERSONS INTERVIEWED\*

	Total Sample	
	No.	%
Hebrew	297	9.9
Catholic	1020	34.0
Baptist	83	2.8
Methodist	179	6.0
Presbyterian	417	13.9
Episcopal	142	4.7
Lutheran	251	8.4
Reformed	119	4.0
Evangelical	31	1.0
Other Prot.	63	2.1
Prot. No Church	243	8.1
Total Prot.	1528	50.9
None	132	4.4
No Answer	23	.8
Total	3000	100.0

\*No recent Census figures were available for comparison.

level. Table 8 shows that the group we sampled was composed of more one and two-family residences, and less apartments than obtained in the 1930 Census. This may very well be due to a change in the type of residence in Irvington during that time. Table 9 shows the proportion of automatic refrigerator ownership in Irvington—there are no data available with which to compare the obtained figures. Table 10 shows the proportion of automobile ownership represented in the sample, and the figures available for Irvington. In this case the obtained proportion of ownership is 8% less than the "actual" figure, but the latter contains three sources of error. In the first place, the number of registrations listed represents the number of licenses issued at the Irvington office, not necessarily all of which were for Irvington residences. In the second place, the total population figure is only an estimate. Finally, the proportion of families owning more than one car is not indicated.

Again, the proportion of telephone ownership obtained on the survey (as shown in Table 11) deviates from the "actual" figure,

TABLE 8  
COMPARISON OF TYPE OF HOUSE OBTAINED ON  
INTERVIEW WITH 1930 CENSUS FIGURES\*

	Total Sample		1930 Census	
	No.	%	No.	%
One Family	1163	38.8	4731	31.3
Two Family	1207	40.2	5384	35.7
Apartment	579	19.3	4985	33.0
No Answer	51	1.7		
Total	3000	100.0	15100	100.0

\*This table is given in terms of the number of families living in each type of dwelling.

TABLE 9  
OWNERSHIP OF AUTOMATIC REFRIGERATORS AMONG  
THOSE INTERVIEWED\*

	Total Sample	
	No.	%
Own Automatic Refrig.	1928	64.2
Don't Own	1064	35.5
No Answer	8	.3
Total	3000	100.0

\*There are no actual figures of ownership available with which to compare these figures.

TABLE 10  
AUTOMOBILE OWNERSHIP AMONG PERSONS INTER-  
VIEWED COMPARED WITH ACTUAL  
REGISTRATION FIGURES\*

	Total Sample		Registration	
	No.	%	No.	%
Own Auto	2072	69.1	12,405	77.1
Don't Own	922	30.7		
No Answer	6	.2		
Total	3000	100.0	16,006	

\*The number of registrations of passenger vehicles in the Irvington office is given here, while the total number of families in the town was estimated by the Town Clerk of Irvington.

TABLE 11  
TELEPHONE OWNERSHIP AMONG PERSONS INTER-  
VIEWED COMPARED WITH ACTUAL  
OWNERSHIP\*

	Total Sample		Actual Figures	
	No.	%	No.	%
Own Phone	1363	45.4		40.0
Don't Own	1626	54.2		60.0
No Answer	11	.4		
Total	3000	100.0		100.0

\*The "actual figures" represent an estimate of residence telephone ownership in the town of Irvington, as made by the Bell Telephone of New Jersey, telephone company serving that area. No closer figures were available.

TABLE 12  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF RACE

	Sample A		Sample B		Sample C		Sample D		Sample E		CR*	P*
	No.	%	No.	%	No.	%	No.	%	No.	%		
White	600	100.0	600	100.0	599	99.8	600	100.0	599	99.8	1.11	86
Black					1	.2			1	.2	1.11	86
Total	600	100.0	600	100.0	600	100.0	600	100.0	600	100.0		

\*In a number of the tables following, the "CR" column refers to the critical ratio of the greatest difference of the percentage in the particular row. The "P" refers to the probability that this difference is not due to chance. In the above table, for example, the critical ratio is secured by dividing the greatest difference (.2) by the standard error of the difference (.18). There are 86 chances in 100 that this difference is not due to chance. When a "CR" is 3.00 or over, "P" is shown as 100, but is actually 99 +.

TABLE 13  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF SEX

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
Men	326	54.3	335	55.8	318	53.0	317	52.8	348	58.0	1.81	96
Women	274	45.7	265	44.2	282	47.0	283	47.2	252	42.0	1.81	96
Total	600	100.0	600	100.0	600	100.0	600	100.0	600	100.0		

TABLE 14  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF AGE

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
20-29	89	14.8	90	15.0	107	17.8	94	15.7	94	15.7	1.41	92
30-44	267	44.5	242	40.3	251	41.8	244	40.7	278	46.3	2.10	98
45-64	211	35.2	229	38.2	210	35.0	222	37.0	199	33.1	1.85	97
65-up	30	5.0	38	6.3	31	5.2	37	6.2	27	4.5	1.38	92
Not given	3	.5	1	.2	1	.2	3	.5	2	.3	.88	81
Total	600	100.0	600	100.0	600	100.0	600	100.1	600	99.9		

but this figure is merely an estimate from the N. J. Bell Telephone Company. (Irvington and Newark exchanges overlap, so no exact figure is available. Moreover, in the telephone company records, business and residence phones are not separated.)

But it can be seen that all of the obtained figures are close to the "actual" figures (see page 364 as to why statistical measures are not given) available, and hence the sample of persons we interviewed may be concluded to be a reasonably representative one.

The next experimental control to be checked upon is the comparability of the five basic questionnaire groups in respect to the sampling characteristics. Tables 12 through 22 indicate the comparability of these groups. The "CR" column is the critical ratio of the highest percentage obtained on an item to the lowest percentage obtained, while the "P" column is the probability (chances in 100) that this is a reliable difference. Obviously, if the highest and the lowest percentages obtained are not reliably different, then those percentages lying between these extremes cannot be reliably different. A critical ratio of 3 or over indicates that the difference has over 99 chances in 100 of being reliable. Any critical ratio of less than 3 cannot be assumed to represent a reliable difference.<sup>11</sup>

The proportion of blacks and whites interviewed in each sample is not reliably different (Table 12). The proportion of men and women interviewed on each sample is not reliably different (Table 13), while only one age group, 30-44, has a critical ratio of over 2 (Table 14).

<sup>11</sup> Other methods of establishing comparability, such as chi-square, could have been used, but it was felt the computation of critical ratios would be adequate for the study.

TABLE 15  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF COUNTRIES OF BIRTH

	Sample No.	A %	Sample No.	B %	Sample No.	C %	Sample No.	D %	Sample No.	E %	CR	P
United States	460	76.7	443	73.8	472	78.8	456	76.0	450	75.0	2.04	98
Germany	46	7.7	49	8.2	40	6.7	55	9.2	42	7.0	1.60	94
Poland	21	3.5	13	2.2	13	2.2	14	2.3	19	3.2	1.35	91
Britain*	15	2.5	15	2.5	14	2.3	18	3.0	17	2.8	.53	70
Sweden	2	.3	4	.7	1	.2	2	.3	2	.3	1.28	90
Austria	7	1.2	9	1.5	7	1.2	13	2.2	13	2.2	1.33	91
Russia	18	3.0	20	3.3	19	3.2	17	2.8	16	2.7	.61	73
Italy	10	1.7	15	2.5	6	1.0	8	1.3	12	2.0	1.97	98
Hungary	3	.5	7	1.2	9	1.5	5	.8	7	1.2	1.75	96
Czechoslovakia			4	.7	3	.5	3	.5	3	.5	2.06	98
France	2	.3					2	.3	1	.2	1.36	66
Other	12	2.0	14	2.3	8	1.3	2	.3	10	1.7	3.08	100
No Answer	4	.7	7	1.2	8	1.3	5	.8	8	1.3	1.05	85
Total	600	100.1	600	100.1	600	100.2	600	99.8	600	100.1		

\*Including England, Scotland, Ireland and Wales.

TABLE 16  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF RELIGION

	Sample No.	A %	Sample No.	B %	Sample No.	C %	Sample No.	D %	Sample No.	E %	CR	P
Hebrew	57	9.5	58	9.7	62	10.3	58	.97	62	10.3	.47	67
Catholic	209	34.8	209	34.8	211	35.2	188	31.3	203	33.8	1.43	93
Baptist	24	4.0	14	2.3	15	2.5	17	2.8	13	2.2	1.80	96
Methodist	30	5.0	36	6.0	38	6.3	34	5.7	41	6.8	1.32	90
Presbyterian	85	14.2	92	15.3	80	13.3	85	14.2	75	12.5	1.40	92
Episcopal	26	4.3	28	4.7	27	4.5	35	5.8	26	4.3	1.19	88
Lutheran	51	8.5	44	7.3	40	6.7	60	10.0	56	9.3	2.08	98
Reformed	20	3.3	18	3.0	30	5.0	19	3.2	32	5.3	2.00	98
Evangelical	7	1.2	4	.7	6	1.0	10	1.7	4	.7	1.59	94
Other Prot.	17	2.8	13	2.2	11	1.8	12	2.0	10	1.7	1.28	90
Prot. No Church	51	8.5	53	8.8	45	7.5	52	8.7	42	7.0	1.15	87
Total Prot.	311	51.8	302	50.3	292	48.6	324	54.0	299	49.8		
None	18	3.0	24	4.0	31	5.2	26	4.3	33	5.5	2.16	98
No Answer	5	.8	7	1.2	4	.7	4	.7	3	.5	1.32	90
Total	600	99.9	600	100.0	600	100.0	600	100.0	600	99.9		



TABLE 17  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF  
ECONOMIC GROUP\*

	Sample No.	A %	Sample No.	B %	Sample No.	C %	Sample No.	D %	Sample No.	E %	CR	P
B	79	13.2	85	14.2	85	14.2	88	14.7	85	14.2	.75	77
C	502	83.7	499	83.2	497	82.8	495	82.5	499	83.2	.56	71
D	19	3.2	16	2.7	18	3.0	17	2.8	16	2.7	.51	69
Total	600	100.1	600	100.1	600	100.0	600	100.0	600	100.1		

\*See page 362 for definition of these groups.

TABLE 18  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF TYPE HOUSE\*

	Sample No.	A %	Sample No.	B %	Sample No.	C %	Sample No.	D %	Sample No.	E %	CR	P
1 Family	243	40.5	226	37.7	216	36.0	241	40.2	237	39.5	1.25	89
2 Family	242	40.3	241	40.2	257	42.8	230	38.3	237	39.5	1.59	94
Apartment	111	18.5	121	20.2	116	19.3	117	19.5	114	19.0	.75	77
No Answer	4	.7	12	2.0	11	1.9	12	2.0	12	2.0	1.97	98
Total	600	100.0	600	100.1	600	100.0	600	100.0	600	100.0		

\*This table is given in terms of the number of families living in each type of dwelling.

TABLE 19  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF AUTOMATIC  
REFRIGERATOR OWNERSHIP

	Sample No.	A %	Sample No.	B %	Sample No.	C %	Sample No.	D %	Sample No.	E %	CR	P
Own	378	63.0	401	66.8	380	63.3	381	63.5	388	64.7	1.38	92
Don't Own	221	36.8	197	32.8	218	36.3	218	36.3	210	35.0	1.45	93
No Answer	1	.2	2	.3	2	.3	1	.2	2	.3	.34	64
Total	600	100.0	600	99.9	600	99.9	600	100.0	600	100.0		

TABLE 20  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF  
AUTOMOBILE OWNERSHIP

	Sample No.	A %	Sample No.	B %	Sample No.	C %	Sample No.	D %	Sample No.	E %	CR	P
Own	418	69.7	407	67.8	420	70.0	412	68.7	415	69.2	.82	79
Don't Own	180	30.0	193	32.2	178	29.7	188	31.3	183	30.5	.93	83
No Answer	2	.3			2	.3			2	.3	1.36	91
Total	600	100.0	600	100.0	600	100.0	600	100.0	600	100.0		

TABLE 21  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF  
TELEPHONE OWNERSHIP

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
Own	266	44.3	281	46.8	267	44.5	265	44.2	284	47.3	1.08	86
Don't Own	332	55.3	315	52.5	331	55.2	335	55.8	313	52.2	1.25	89
No Answer	2	.3	4	.7	2	.3			3	.5	2.06	98
Total	600	99.9	600	100.0	600	100.0	600	100.0	600	100.0		

TABLE 22  
COMPARISON OF FIVE BASIC SAMPLES IN TERMS OF  
VOTERS WHO WILL VOTE

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
Voters Who Will Vote	336	56.0	368	61.3	331	55.2	344	57.4	347	57.8	2.08	98

TABLE 23  
COMPARISON OF FIVE SAMPLES OF VOTERS IN TERMS OF RACE

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
White	336	100.0	368	100.0	330	99.7	344	100.0	346	99.7	1.00	84
Black					1	.3			1	.3	1.00	84
Total	336	100.0	368	100.0	331	100.0	344	100.0	347	100.0		

Table 15 shows the only case of a critical ratio of over 3 in any of the sampling data obtained, and this is for persons born in "other" countries. Since the difference in the extremes here is one of only 12 cases, it could have but little effect on any of the questions asked.

The religions of the persons interviewed show no statistically reliable differences (Table 16).

There is evidence that all of the samples secured are well within the range allowed by chance on the distribution of income levels (Table 17). The same thing is true for type of house, ownership of automatic refrigerators, and automobile ownership (Tables 18, 19 and 20). In the case of the ownership of telephones in each one of the basic questionnaire groups, the only critical ratio above 2

is that for the category "no answer" (Table 21), and, since this is due to a difference of only 4 cases between Sample B and Sample D, it can scarcely enter into the results secured on any of

TABLE 24  
COMPARISON OF FIVE SAMPLES OF VOTERS  
IN TERMS OF SEX

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
Men	216	64.3	223	60.6	205	61.9	204	59.3	217	62.5	1.34	91
Women	120	35.7	145	39.4	126	38.1	140	40.7	130	37.5	1.34	91
Total	336	100.0	368	100.0	331	100.0	344	100.0	347	100.0		

TABLE 25  
COMPARISON OF FIVE SAMPLES OF VOTERS  
IN TERMS OF AGE

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
20-29	31	9.2	39	10.6	41	12.4	36	10.5	41	11.8	1.33	91
30-44	160	47.6	151	41.0	141	42.6	147	42.7	172	49.6	2.32	99
45-64	121	36.0	157	42.7	135	40.8	139	40.4	118	34.0	2.40	99
65-up	22	6.5	20	5.4	14	4.2	21	6.1	14	4.0	1.46	93
Not Given	2	.6	1	.3			1	.3	2	.6	1.46	93
Total	336	99.9	368	100.0	331	100.0	344	100.0	347	100.0		

TABLE 26  
COMPARISON OF FIVE SAMPLES OF VOTERS  
IN TERMS OF COUNTRIES OF BIRTH

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
United States	269	80.1	283	76.9	269	81.3	277	80.5	283	81.6	1.55	93
Germany	24	7.1	28	7.6	17	5.1	23	6.7	12	3.5	2.41	99
Poland	12	3.6	4	1.1	4	1.2	3	.9	7	2.0	2.37	99
Britain*	6	1.8	10	2.7	7	2.1	8	2.3	6	1.7	.92	82
Sweden	1	.3	3	.8	1	.3	1	.3	1	.3	.91	82
Austria	5	1.5	4	1.1	3	.9	5	1.5	6	1.7	.92	82
Russia	7	2.1	12	3.3	13	3.9	11	3.2	9	2.6	1.36	91
Italy	4	1.2	6	1.6	2	.6	4	1.2	4	1.2	1.28	90
Hungary	1	.3	3	.8	5	1.5	4	1.2	3	.9	1.64	95
Czechoslovakia			3	.8	1	.3	2	.6	1	.3	1.74	96
France	1	.3					2	.6	1	.3	1.43	93
Other	4	1.2	8	2.2	5	1.5	1	.3	8	2.3	2.33	99
No Answer	2	.6	4	1.1	4	1.2	3	.9	6	1.7	1.36	91
Total	336	100.1	368	100.0	331	99.9	344	100.2	347	100.1		

\*Including England, Scotland, Ireland and Wales.

TABLE 27  
COMPARISON OF FIVE SAMPLES OF VOTERS IN TERMS  
OF RELIGION

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
Hebrew	29	8.6	31	8.4	39	11.8	31	9.0	38	11.0	1.48	93
Catholic	104	31.0	124	33.7	108	32.6	108	31.2	109	31.4	.76	77
Baptist	13	3.9	9	2.4	4	1.2	14	4.1	8	2.3	2.36	99
Methodist	18	5.4	25	6.8	26	7.9	25	7.3	28	8.1	.66	74
Presbyterian	53	15.8	61	16.6	53	16.0	56	16.3	50	14.4	.81	79
Episcopal	17	5.1	21	5.7	11	3.3	19	5.5	15	4.3	1.54	93
Lutheran	28	8.3	27	7.3	18	5.4	29	8.4	30	8.6	1.64	95
Reformed	17	5.1	12	3.3	20	6.0	9	2.6	21	6.1	1.76	96
Evangelical	6	1.8	2	.5	1	.3	7	2.0	4	1.2	2.10	98
Other Prot.	11	3.3	11	3.0	7	2.1	8	2.3	6	1.7	1.33	91
Prot. No Ch.	28	8.3	31	8.4	25	7.6	25	7.3	24	6.9	.76	77
Total Prot.	191	56.9	199	54.0	165	49.8	192	55.8	186	53.6		
None	10	3.0	11	3.0	15	4.5	10	2.9	11	3.2	1.10	86
No Answer	2	.6	3	.8	4	1.2	3	.9	3	.9	.82	79
Total	336	100.1	368	99.9	331	99.9	344	99.8	347	100.1		

TABLE 28  
COMPARISONS OF FIVE SAMPLES OF VOTERS IN TERMS  
OF ECONOMIC GROUP\*

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
B	47	14.0	58	15.8	51	15.4	53	15.4	56	16.1	.77	77
C	277	82.4	304	82.6	270	81.6	284	82.6	281	81.0	.55	71
D	12	3.6	6	1.6	10	3.0	7	2.0	10	2.9	1.65	95
Total	336	100.0	368	100.0	331	100.0	344	100.0	347	100.0		

\*Definitions of these groups will be found on page 362 of the text.

TABLE 29  
COMPARISONS OF FIVE SAMPLES OF VOTERS IN TERMS  
OF TYPE HOUSE\*

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
1 Family	147	43.7	152	41.3	129	39.0	150	43.6	149	42.9	1.24	89
2 Family	141	42.0	141	38.3	141	42.6	125	36.3	134	38.6	1.68	96
Apartment	47	14.0	71	19.3	55	16.6	64	18.6	58	16.7	1.89	97
No Answer	1	.3	4	1.1	6	1.8	5	1.5	6	1.7	.53	70
Total	336	100.0	368	100.0	331	100.0	344	100.0	347	99.9		

\*This table is given in terms of the number of families living in each type of dwelling.

TABLE 30  
COMPARISONS OF FIVE SAMPLES OF VOTERS IN TERMS OF  
AUTOMATIC REFRIGERATOR OWNERSHIP

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
Own	218	64.9	258	70.1	213	64.4	223	64.8	235	67.7	1.61	94
Don't	118	35.1	109	29.6	117	35.3	121	35.2	110	31.7	1.61	94
No Answer			1	.3	1	.3			2	.6	1.46	93
Total	336	100.0	368	100.0	331	100.0	344	100.0	347	100.0		

TABLE 31  
COMPARISONS OF FIVE SAMPLES OF VOTERS IN TERMS OF  
AUTOMOBILE OWNERSHIP

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
Own	238	70.8	254	69.0	237	71.6	247	71.8	248	71.5	.82	79
Don't	98	29.2	114	31.0	93	28.1	97	28.2	98	28.2	.84	80
No Answer					1	.3			1	.3	.01	50
Total	336	100.0	368	100.0	331	100.0	344	100.0	347	100.0		

TABLE 32  
COMPARISONS OF FIVE SAMPLES OF VOTERS IN TERMS OF  
TELEPHONE OWNERSHIP

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
Own	169	50.3	193	52.4	168	50.8	176	51.2	181	52.1	.56	71
Don't	167	49.7	173	47.0	162	48.9	168	48.8	164	47.3	.71	76
No Answer			2	.5	1	.3			2	.6	1.46	93
Total	336	100.0	368	99.9	331	100.0	344	100.0	347	100.0		

the opinion questions. The proportion of voters who intend to vote is comparable in the five samples (Table 22).

There is surely enough evidence to indicate that the five basic samples are essentially comparable in the sampling information that was obtained on the interview.

Since the five groups of "voters who intend to vote" are to be used later as equivalent groups, it is necessary to show that these groups are also comparable in terms of the same sampling characteristics. Tables 23 through 32 present these comparisons.

The proportion of whites and blacks in each sample of voters is within the difference expected by chance (Table 23). There is evidence that the proportion of men and women interviewed is

within chance limits (Table 24). In the comparison of the five groups in terms of age (Table 25), there are only two classifications which have a critical ratio of over 2, while there are only three countries of birth which produce a critical ratio of over 2 (Table 26).

There are only two critical ratios in comparison of religions of the five groups of voters (Table 27), which are over 2. In the case of the Baptist group, this is a difference of 10 cases in the extremes, and a difference of 6 for the Evangelical group, neither of which could cause a large shift in the proportion of answers to the racing question. And Tables 28 through 32 show no critical ratio at all over 2, which would indicate that the five groups of voters are essentially comparable in terms of economic group, type of house, automatic refrigerator ownership, automobile ownership, and telephone ownership.

It may be concluded that the five samples of voters are essentially similar and comparable in the sampling characteristics that were measured.

Ten interviewers each completed 30 interviews daily throughout the ten-day period.<sup>15</sup> These interviews were distributed in accordance with the voters and their sex, district by district, the area covered by any one interviewer varying from day to day. The interviewers were instructed to begin each day's work with Questionnaire Form A, following with B, C, D and E, in that order, so that at the end of the day, each interviewer would have completed 5 interviews of each form. This technique provided a number of experimental controls:

1. The time element was controlled. If attitudes of any of the questions varied from day to day, such a variation should have an equal effect on all questionnaire forms, since the same number of each was completed day by day. Furthermore, if there were any practise effect in the interviewing itself, this should be a constant for each form.
2. The sample for each form, as already shown, was a constant.
3. The interviewer element was a constant, since, even if one interviewer was predisposed to secure certain results on particular questions, this would be a constant with each form. This element was further con-

<sup>15</sup> Actually there were 12 interviewers used, 2 of whom refused to continue throughout the period, and had to be replaced.

trolled, of course, by giving each interviewer standard instructions, as shown in the Appendix.

4. The context was approximately a constant for each form of the questionnaire, not only in the approach of the interviewer, which was a standard, defined in the instructions to interviewers (see Appendix), but also by the fact that every respondent was interviewed in his home individually.

As a further precaution that the interviewer element would not vitiate the results secured, only experienced interviewers were used on the study.<sup>16</sup> As a check on the honesty of the work of each interviewer, at least two telephone calls were completed daily throughout the period of the study without the knowledge of the interviewer, with two of the persons he claimed to have interviewed on the preceding day. In no case was there any indication that the interview had not been completed.

With the knowledge, then, that the entire sample was a representative one of the town of Irvington, that the samples for the five questionnaires were comparable, and that such factors as time element, interviewer element, and context had been held approximately constant, the results obtained with the five forms of each of the variable questions can be presented.

The questions will be evaluated in four respects:

1. *Validity.* As already stated, the validity of each of the question forms will be secured by comparing the results from registered voters intending to vote from each of the five forms with the actual election returns of the town. (on the horseracing and parimutuel question)

2. *Consistency.* By means of splitting each group into halves and comparing the results, consistency of group response with each of the five variables will be secured for all of the variable questions.

3. *Suggestion.* Each of the question forms will be evaluated by comparing the proportion of affirmative and negative answers, to determine the direction and extent of any suggestion which may operate.

4. *Indecision.* The proportion of "don't know" answers will be compared for each form of the five variable questions to determine which form most frequently gives the highest proportion of "don't know" responses.

<sup>16</sup> These interviewers had worked for the Psychological Corporation, the American Institute of Public Opinion, The Newark Research Centre, or The Princeton Radio Research Project. All of the interviewers were thoroughly trained for the present interview, and their technique was checked by having them interview the writer before they began their calls.

In general, of course, it can be said that, *other things being equal*, the form of the question having the greatest validity and consistency, and the least suggestion and indecision influence, would be the best question form. And since the "other things" are a constant here (the sample for each question form, the other constants mentioned in the method, and the content of each question) it may be assumed that these criteria are adequate ones for evaluation of the five question forms we have used in the present study.

### III. RESULTS

Before any analysis of results classified according to the question form is presented, results without such breakdowns will be shown. Table 33<sup>17</sup> shows the results secured with each of the variable questions, while Table 34 shows the results gathered on each questionnaire with the standard questions.

No discussion of these tables will be given at this time, except to note that in the case of the variable questions, the differences secured with varying forms will be shown in many cases to be reliable statistically. In the case of the standard questions, only two differences are reliable statistically, but a later breakdown of these results will include discussion of this point.

Results will be summarized under two principal headings: (1) results secured from the variable questions, and (2) results secured with the standard questions.

#### RESULTS SECURED FROM THE VARIABLE QUESTIONS

As already indicated, these results will be analyzed in four respects: (1) validity, (2) consistency, (3) suggestion, and (4) indecision. These terms, previously briefly defined, will be enlarged upon as the results are presented.

*Validity.* The method used for determining the validity of each question form was a comparison of the results for each form with the actual election returns in the town of Irvington. It should be stressed at this point that validity is the most important of the four criteria to be used in evaluating the question forms. Table

<sup>17</sup> See Tables 1 through 5 in the Appendix for statistical reliabilities of each of the differences secured.



TABLE 33  
UNTREATED RESULTS OF VARIABLE QUESTIONS\*

Q.	Objective	Subjective		Positive Objective		P. O. C. L.		Negative Objective		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
Q. 2	Helping	164	27.3	200	33.3	232	38.7	184	30.7	205	34.2
	Hurting	203	33.8	186	31.0	189	31.5	216	36.0	206	34.3
	Don't Know	233	38.8	214	35.7	179	29.8	200	33.3	189	31.5
	Total	600	99.9	600	100.0	600	100.0	600	100.0	600	99.9
Q. 4	Desirable	411	68.5	433	72.2	418	69.7	406	67.7	384	64.0
	Undesirable	43	7.2	34	5.7	62	10.3	53	8.8	103	17.2
	Don't Know	146	24.3	133	22.2	120	20.0	141	23.5	113	18.8
	Total	600	100.0	600	100.1	600	100.0	600	100.0	600	100.0
Q. 6	Favorable	245	40.8	268	44.7	254	42.3	240	40.0	256	42.7
	Unfavorable	215	35.8	208	34.7	217	36.2	248	41.3	224	37.3
	Don't Know	140	23.3	124	20.7	129	21.5	112	18.7	120	20.0
	Total	600	99.9	600	100.1	600	100.0	600	100.0	600	100.0
Q. 8	Desirable	341	56.8	292	48.7	369	61.5	308	51.3	221	36.8
	Undesirable	53	8.8	63	10.5	89	14.8	76	12.7	153	25.5
	Don't Know	206	34.3	245	40.8	142	23.7	216	36.0	226	37.7
	Total	600	99.9	600	100.0	600	100.0	600	100.0	600	100.0
Q. 10	Continue	281	46.8	287	47.8	276	46.0	275	45.8	305	50.8
	Break	164	27.3	158	26.3	168	28.0	142	23.7	144	24.0
	Don't Know	155	25.8	155	25.8	156	26.0	183	30.5	151	25.2
	Total	600	99.9	600	99.9	600	100.0	600	100.0	600	100.1

\*It will be recalled that in many of the tables preceding this one, results of Sample A have been compared with those of Samples B, C, D, and E. In this table, however, the particular sample of the population is not referred to by columns in the table, for the samples varied according to the questionnaire form used, as defined in the text.

TABLE 34  
COMPARISON OF STANDARD QUESTIONS IN FIVE BASIC SAMPLES

	Sample A	Sample B	Sample C	Sample D	Sample E	Total	CR	P
	No.	No.	No.	No.	No.	No.		
	%	%	%	%	%	%		
Q. 1. Have you refused to buy either Japanese or German goods?								
Japanese	87	68	63	75	65	358	2.09	98
German	14	2.3	12	1.8	6	58	1.78	96
Both	215	35.8	228	34.5	207	1078	1.26	89
Neither	282	47.0	291	51.0	317	1497	2.01	98
Don't Know	2	.3	1	.2	5	9	2.22	99
Total	600	99.9	600	100.0	600	3000	99.9	
Q. 3. Do you favor a third term for President Roosevelt?								
Yes	183	30.5	201	33.5	203	974	2.19	99
No	317	52.8	306	51.0	301	1522	2.08	98
Don't Know	100	16.7	93	15.5	96	504	1.16	87
Total	600	100.0	600	100.0	600	3000	100.0	
Q. 5. Do you believe prosperity will increase before the end of 1939?								
Yes	160	26.7	174	27.8	181	843	1.35	91
No	288	48.0	271	45.2	268	1334	2.38	99
Don't Know	152	25.3	155	25.8	151	823	2.24	99
Total	600	100.0	600	100.0	600	3000	100.0	
Q. 7. Should the United States cancel foreign war debts?								
Yes	53	8.8	62	10.3	58	316	3.19	100
No	441	73.5	436	72.7	442	2182	1.85	96
Don't Know	106	17.7	102	17.0	103	502	.88	81
Total	600	100.0	600	100.0	600	3000	99.9	
Q. 9. Should the United States supply financial aid to the railroad?								
Yes	254	42.3	277	46.2	266	1295	1.75	96
No	134	22.3	148	24.7	171	754	2.47	99
Don't Know	212	35.3	175	29.2	163	951	3.03	100
Total	600	99.9	600	100.1	600	3000	100.0	

TABLE 35  
RESULTS OF HORSERACING VARIABLE QUESTION WITH FIVE  
FORMS OF QUESTION  
(Based on Total Answers)

	Objective		Subjective		Positive Objective		P.O.C.L.		Negative Objective	
	No.	%	No.	%	No.	%	No.	%	No.	%
Favorable	145	42.2	180	51.9	166	49.4	144	39.1	158	47.7
Unfavorable	148	43.0	133	38.3	129	38.4	177	48.0	137	41.4
Don't Know	51	14.8	34	9.8	41	12.2	47	12.8	36	10.9
Total	344	100.0	347	100.0	336	100.0	368	99.9	331	100.0

TABLE 36  
SHOWING ACTUAL ELECTION RETURNS IN IRVINGTON  
ON THE HORSERACING ISSUE

	No. Votes	% Votes
Favorable	3494	50.0
Unfavorable	3499	50.0
Total	6993	100.0

35 shows raw results of the five forms of the horseracing question as obtained among five samples of voters who stated at the time of the interview that they intended to vote in the special election.<sup>18</sup> This table shows some interesting differences in the responses secured with the five forms. Since only the predictive accuracy of each question form is being considered at this time, a comparison of this table with Table 36 (which shows actual election returns) is very enlightening. To establish a direct measure of validity, the "don't know" responses must first be disregarded, leaving only the definite answers; that is, the responses indicating a definite attitude either favorable or unfavorable to the horseracing proposal must be the only answers included in this measure. Using the total number of definite responses as a basis for com-

<sup>18</sup> See the description on page 361 as to why the entire sample of persons interviewed was not included in the determination of validity. These five groups have been shown to be comparable in terms of sampling characteristics, and as a further check of their comparability, answers to Q. 3, a standard question, were compared. Table 9 in the Appendix shows that the answers of the five groups of voters on this question did not differ more than would be expected by chance.

TABLE 37

RESULTS OF HORSERACING VARIABLE QUESTION WITH FIVE  
FORMS OF QUESTION  
(Based on definite answers)

	Objective		Subjective		Positive Objective		P.O.C.L.		Negative Objective	
	No.	%	No.	%	No.	%	No.	%	No.	%
Favorable	145	49.5	180	57.5	166	56.3	144	44.9	158	53.6
Unfavorable	148	50.5	133	42.5	129	43.7	177	55.1	137	46.4
Total Definite Answers	293	100.0	313	100.0	295	100.0	321	100.0	295	100.0

TABLE 38

SHOWING PREDICTIVE VALIDITY OF VARIABLE FORMS OF HORSE-  
RACING QUESTION AMONG VOTERS WHO WILL VOTE  
(Showing total agreement between vote cast and definite answers)

	Objective		Subjective		Positive Objective		P.O.C.L.		Negative Objective	
	No.	%	No.	%	No.	%	No.	%	No.	%
Items Agreeing	290	99.0	266	85.0	258	87.4	288	89.8	274	92.8
Total Definite Answers	293		313		295		321		295	

putation, the number and percentage of these replies that agree with the election returns may readily be determined.<sup>19</sup> This has been done in Table 38. Striking differences are apparent in the validity of the five forms. The objective form is the most valid (99.0%), followed by the negative objective (92.8%), the positive objective with check list<sup>20</sup> (89.8%), the positive objective (87.4%), and the subjective (85.0%). Five of the ten differences are statistically reliable as shown in Table 39. The objective validity is reliably superior to all of the others; the negative objective is statistically superior only to the subjective; while the position of the two remaining forms, although probably indicative, is not statistically reliable.

<sup>19</sup> For example, in Table 37, the affirmative replies to the objective form are 49.5%, a deviation from the election returns of .5%. The negative replies show the same deviation, so the total form lacks 1% of being entirely valid.

<sup>20</sup> Hereafter referred to as the "P.O.C.L."

*Consistency.* The usual technique in securing a measure of consistency of response to a number of unrelated questions such as have been used in this study is to secure a number of follow-up

TABLE 39  
SHOWING THE DIFFERENCES AND RELIABILITIES OF THE  
DIFFERENCES FOR THE DATA IN TABLE 38

Conditions Compared	Diff.	Sigma	CR	P
	(in %)	Diff.		
Objective-Subjective	14.0	2.10	6.67	100
Objective-Positive Obj.	11.6	2.02	5.74	100
Objective-P.O.C.L.	9.2	1.79	5.14	100
Objective-Negative Obj.	6.2	1.61	3.85	100
Subjective-Positive Obj.	2.4	2.79	.86	80
Subjective-P.O.C.L.	4.8	2.63	1.83	96
Subjective-Negative Obj.	7.8	2.52	3.09	100
Positive Objective-P.O.C.L.	2.4	2.57	.93	83
Positive Objective-Negative Obj.	5.4	2.45	2.20	99
P.O.C.L.-Negative Obj.	3.0	2.26	1.33	91

calls, asking the same questions of the identical group of people originally interviewed. Consistency is then determined by computing the percentage of agreement between the original and follow-up response to each question. Jenkins (7) has made a study of consistency of response to various brand-buying questions. He found definite differences in consistency with different subject-matters. His results have been fully substantiated, and somewhat extended by unpublished data gathered by the Psychological Corporation. Since both of these studies point to the fact that different subject-matters influence consistency of response, it seems worth while to discover whether changes in question forms also affect consistency. For this reason, it was felt that a measure of consistency might prove very illuminating if secured for each of the variable questions.

The follow-up method of measuring consistency was not used in this study, however. Rather, a method was used which involved dividing the interviews into odd and even calls immediately after they were made so that the two groups to be compared would be

essentially similar. Now it is realized that such a method of measuring consistency is not at all comparable to the previously described method. The follow-up method is a measure of individual consistency of response, and involves such factors as the person's memory for the original interview and response, actual changes in attitudes (or brand-buying behavior, as the case may be), and the like. The odd-even method does not depend upon such factors as these, but rather upon the similarity of the distribution of answers where the group is broken down into basically comparable samples.

The formula  $\sigma = \sqrt{\frac{pq}{N}}$  is generally applied to show reliability or unreliability of differences obtained between various samples, regardless of question form or content used as long as that question is a constant. A minor purpose of this section of the paper is to show that this formula should not be applied indiscriminately, but that possibly some correction factor should be determined empirically for each question form and content to be compared,<sup>21</sup> since we will show that this variation is dependent upon the form and content of the question, as well as on the size of the sample. Table 40 gives the measure of consistency for each of the variable questions in all of its forms. It is at once apparent that

TABLE 40  
COMPARISON OF CONSISTENCIES FOR VARIABLE  
QUESTIONS IN FIVE BASIC SAMPLES

(Expressed in terms of number and percentage of identical responses on an odd-even distribution of interviews.)

	Objective		Subjective		Positive Objective		P.O.C.L.		Negative Objective	
	No.	%	No.	%	No.	%	No.	%	No.	%
Q.2.	276	92.0	278	92.7	285	95.0	298	99.3	279	93.0
Q.4.	275	91.7	287	95.7	286	95.3	294	98.0	277	92.3
Q.6.	290	96.7	290	96.7	289	96.3	290	96.7	280	93.3
Q.8.	278	92.7	288	96.0	295	98.3	296	98.7	289	96.3
Q.10.	279	93.0	291	97.0	292	97.3	279	93.0	287	95.7
Total	1398	93.2	1434	95.6	1447	96.5	1457	97.1	1412	94.1

<sup>21</sup> The author has not attempted to arrive at such corrections and is himself guilty of using this formula "indiscriminately."

TABLE 41  
SHOWING THE DIFFERENCES AND RELIABILITIES OF THE  
DIFFERENCES FOR THE DATA IN TABLE 40

Conditions Compared	Diff. (in %)	Sigma Diff.	CR	P
Objective-Subjective	2.4	.59	4.07	100
Objective-Positive Obj.	3.3	.57	5.79	100
Objective-P.O.C.L.	3.9	.55	7.09	100
Objective-Negative Obj.	.9	.63	1.43	93
Subjective-Positive Obj.	.9	.50	1.80	96
Subjective-P.O.C.L.	1.5	.48	3.12	100
Subjective-Negative Obj.	1.5	.57	2.63	99
Positive Obj.-P.O.C.L.	.6	.45	1.33	91
Positive Obj.-Negative Obj.	2.4	.55	4.36	100
P.O.C.L.-Negative Obj.	3.0	.53	5.66	100

the order of consistency for each question form is approximately the same regardless of question content.

In general, the P.O.C.L. gives the highest consistency (97.1%, on the average), followed by the positive objective (having an average of 96.5%), the subjective (95.6%), the negative objective (94.1%), and the objective (93.2%). Table 41 shows that six of the ten consistency differences are statistically reliable. It is apparent, for example, that the P.O.C.L. is reliably<sup>22</sup> more consistent than three of the other four forms, while the objective is reliably inferior to three of the four forms.

As a matter of interest, the reader might refer to Table 8 in the Appendix, which gives consistency figures for the standard social questions. This table indicates that there are differences in this odd-even consistency measure for varying subject matters, although statistical measurements of reliability have not been computed.<sup>23</sup>

<sup>22</sup> "Reliably" is here defined as referring to differences with a critical ratio of 3.00 or over.

<sup>23</sup> These consistency figures cannot be compared with the totals shown in Table 40 even though the base in each case is 1,500 interviews. It will be remembered that the consistencies for the variable questions were secured by an addition of the consistencies of five sub-groups in each case, which would tend to materially decrease the percentage of agreement for the total.

*Suggestibility.* One might assume that in order to measure any influence of suggestion on the responses secured, all that need be done is to compare the proportion of "yes" and "no" answers in each case. However, the matter is not so simple. It is true that such a method gives a crude indication of suggestibility, but the question immediately arises as to whether one extreme secured (for example, the highest proportion of affirmative answers on one of the questions) might not actually be the most exact (valid) measure of the response. For example, on the horseracing issue, Table 37 shows us that the highest proportion of favorable answers results from the subjective form of the question. Does this of necessity indicate that the subjective form here shows the greatest affirmative suggestion influence? There is no answer to this until the validity percentages shown in Table 38 are considered as a starting point.<sup>21</sup> This table shows that the objective question form is most nearly the zero point of suggestion since it has such a high validity percentage. From a comparison of this table and Table 37, it can be seen then, that the subjective form is definitely the most affirmatively suggestive question, since the highest proportion of "yes" answers results *above* the zero point (the zero point being defined as where little or no suggestion is evident, as shown by high validity) and the positive and negative objective are also suggestive in the same direction. The P.O.C.L. shows, in the same way, negative suggestion influence.

With this preliminary knowledge, then, the results from all of the questions can be considered, as summarized in Table 42. If it is assumed that the objective question form is most valid, the only assumption possible from available evidence, then the subjective and positive objective indicate affirmative suggestion influence, while the negative objective and the P.O.C.L. show negative suggestion.

However, only two of the ten differences are statistically reliable as shown in Table 7 of the Appendix, both of these indicating that the negative objective shows negative suggestion. But the order of the other items is at least somewhat indicative.

<sup>21</sup> We admit, however, that the suggestion results are based on five questions, and the validity on only one question but we feel that it is better to assume this neutral point rather than merely to guess one.



TABLE 42  
SUMMARY OF AFFIRMATIVE AND NEGATIVE ANSWERS TO  
VARIABLE QUESTIONS

	Objective		Subjective		Positive Objective		P.O.C.L.		Negative Objective	
	No.	%	No.	%	No.	%	No.	%	No.	%
Affirmative	1442	68.0	1480	69.5	1549	68.1	1413	65.8	1371	62.3
Negative	678	32.0	649	30.5	725	31.9	735	34.2	830	37.7
Total	2120	100.0	2129	100.0	2274	100.0	2148	100.0	2201	100.0

We already saw, in Table 33, untreated results for all variable questions. In general, the trend for the forms with each content is about the same, although exceptions are apparent.

Since these differences in rank were fairly consistent in the case of various contents, it should be expected that the deviations from the zero point in suggestion would follow the same order as the validity. In the case of the question on horseracing, this is actually the case. The negative objective shows 4.1% deviation from the zero point (the most valid question, the objective) and is second most valid. Results for all of the deviations on this question as compared with their validities are shown in Table 43.

*Indecision.* Generally speaking, provided the content of a question is a constant, the fewer "don't know" responses secured, the safer is the ground on which the interpretation of public opinion questionnaires rests. That is to say, if questionnaire results indicate

TABLE 43  
SHOWING A COMPARISON OF THE SUGGESTION  
DEVIATION AND THE VALIDITY FOR THE  
HORSERACING ISSUE

	Deviation of Affirmative Answers from Zero Point of Suggestion (in %)	Validity (in %)
Objective	.0	99.0
Negative Objective	+4.1	92.8
P.O.C.L.	-4.6	89.8
Positive Objective	+6.8	87.4
Subjective	+8.0	85.0

TABLE 44  
SUMMARY OF AFFIRMATIVE, NEGATIVE AND DON'T KNOW  
ANSWERS TO VARIABLE QUESTIONS

	Objective		Subjective		Positive Objective		P.O.C.L.		Negative Objective	
	No.	%	No.	%	No.	%	No.	%	No.	%
Affirmative	1442	48.1	1480	49.3	1549	51.6	1413	47.1	1371	45.7
Negative	678	22.6	649	21.6	725	24.2	735	24.5	830	27.7
Don't Know	880	29.3	871	29.0	726	24.2	852	28.4	799	26.6
Total	3000	100.0	3000	99.9	3000	100.0	3000	100.0	3000	100.0

20% of a group favoring an issue, 20% opposed, and 60% undecided, it can be seen that securing definite responses from the "don't know" group might readily change the entire complexion of the results. If the question can be so worded that a large proportion of this undecided group can be made to express an opinion, without changing the content or apparent meaning of the question, the researcher can therefore be much happier about his results. Thus, in the present study, one of the methods used for evaluating the question forms was the proportion of "don't know" answers secured with each form.

Table 44 shows the total of "don't know" answers for each form of the question. It can be seen here that the highest proportion of "don't know" answers (29.3%) is secured with the objective form, while the lowest proportion of "don't know" answers (24.2%) was secured with the positive objective form.

Only a few of these differences are statistically reliable (Table 45). It can be seen, for example, that there is a real difference between the extremes. We can also say that there is a reliable difference between the positive objective and the P.O.C.L. as well as between the positive objective and the subjective.

Consideration of Table 33 will give us an indication of how consistent this order of "don't know" responses is within each one of the five variable questions. For example, question 2 also has the highest proportion of "don't know" answers with the objective form, the least with the positive objective. In question 4 the objective form produces the highest proportion of "don't know" responses, while the negative objective has the lowest proportion, followed by the positive objective. In question 6 the objective again

TABLE 45  
SHOWING THE DIFFERENCES AND RELIABILITIES OF THE  
DIFFERENCES FOR THE DATA IN TABLE 44

Conditions Compared	Type Answer	Diff. (in %)	Sigma Diff.	CR	P
Objective-Subjective	Affirmative	1.2	1.21	.99	84
Objective-Positive Obj.	Affirmative	3.5	1.29	2.71	99
Objective-P.O.C.L.	Affirmative	1.0	1.29	.78	78
Objective-Negative Obj.	Affirmative	2.4	1.29	1.86	97
Subjective-Positive Obj.	Affirmative	2.3	1.29	1.78	96
Subjective-P.O.C.L.	Affirmative	2.2	1.29	1.71	96
Subjective-Negative Obj.	Affirmative	3.6	1.29	2.79	99
Positive Obj.-P.O.C.L.	Affirmative	4.5	1.29	3.49	100
Positive Obj.-Negative Obj.	Affirmative	5.9	1.29	4.57	100
P.O.C.L.-Negative Obj.	Affirmative	1.4	1.29	1.09	86
Objective Subjective	Negative	1.0	1.07	.93	83
Objective-Positive Obj.	Negative	1.6	1.09	1.47	93
Objective-P.O.C.L.	Negative	1.9	1.10	1.73	96
Objective-Negative Obj.	Negative	5.1	1.12	4.55	100
Subjective-Positive Obj.	Negative	2.6	1.08	2.41	99
Subjective-P.O.C.L.	Negative	2.9	1.09	2.66	99
Subjective-Negative Obj.	Negative	6.1	1.11	5.49	100
Positive Obj.-P.O.C.L.	Negative	.3	1.11	.27	61
Positive Obj.-Negative Obj.	Negative	3.5	1.13	3.10	100
P.O.C.L.-Negative Obj.	Negative	3.2	1.13	2.83	99
Objective-Subjective	Don't Know	.3	1.17	.26	60
Objective-Positive Obj.	Don't Know	5.1	1.14	4.47	100
Objective P.O.C.L.	Don't Know	.9	1.17	.77	78
Objective-Negative Obj.	Don't Know	2.7	1.16	2.33	99
Subjective-Positive Obj.	Don't Know	4.8	1.14	4.21	100
Subjective-P.O.C.L.	Don't Know	.6	1.17	.51	69
Subjective-Negative Obj.	Don't Know	2.4	1.16	2.07	98
Positive Obj.-P.O.C.L.	Don't Know	4.2	1.14	3.68	100
Positive Obj.-Negative Obj.	Don't Know	2.4	1.12	2.14	98
P.O.C.L.-Negative Obj.	Don't Know	1.8	1.15	1.57	94

has the highest proportion of "don't know's," while the P.O.C.L. has the lowest, and in this case, the positive objective is next to the highest. In question 8, the subjective produces the highest proportion of "don't know" answers and the positive objective the lowest. Question 10 shows the highest P.O.C.L. responses, while the negative objective is lowest. As would be expected, the subject matter

of the question, as well as the question form itself, influences the proportion of "don't know" responses. Now the table just considered does not show a great overweighing of responses for any one or more question forms within one particular question group. This means that the final summary of "don't know" responses for the five forms is probably indicative of a general trend which shows up despite varying content with each question form.

#### RESULTS SECURED WITH THE STANDARD QUESTIONS

Although only 2 of the 170 differences secured for the results of the standard questions are reliable statistically (critical ratio of 3.00 or over), nevertheless since the probabilities of difference of the extremes for any one question on different samples is frequently rather high (12 of the 17 extreme probabilities shown are above 90), it was believed that an analysis of these standard questions in terms of the variable forms they followed might be enlightening. Such an analysis would show any carryover effect that the variable forms might have upon the standard questions.

To determine whether or not there has been such a carryover effect, all that need be done is to line up the results of the standard questions according to the form of the immediately preceding variable question. This has been done for all of the measures described in connection with the variable questions except validity<sup>25</sup> (for which there was no measure against which to check any of the standard questions).

*Consistency.* Table 46 shows the consistency results summarized for each standard question according to what form of the variable question it followed.<sup>26</sup> We can see, for example, that the

<sup>25</sup> It might be noted here that even though the untreated results of the five standard questions show few reliable differences statistically, and do not raise any doubt as to the comparability of the five groups interviewed, the variable questions were found to influence the immediately subsequent standard questions so much that reliable differences were found for the consistency criterion. Although the differences for suggestion and indecision were not reliable, the order was related to the order of the preceding variable results. The differences are clearly due, by their nature, to the variable questions.

<sup>26</sup> Only four of the standard questions can be analyzed as following variable questions, since the first question in the questionnaire was a standard question.

TABLE 46

SHOWING THE INFLUENCE OF PRECEDING VARIABLE QUESTION  
UPON CONSISTENCY OF RESPONSE TO STANDARD  
SOCIAL QUESTIONS

(Expressed in terms of number and percentage of identical responses on an odd-even distribution of interviews)

	Objective		Subjective		Positive Objective		P.O.C.L.		Negative Objective	
	No.	%	No.	%	No.	%	No.	%	No.	%
Identical Responses	1162	96.8	1152	96.0	1130	94.2	1155	96.3	1166	97.2

Note: The greatest difference (of percentages) in this table is between the objective and positive objective results, a difference of 2.6. The critical ratio here is 4.33, showing that this difference is a reliable one.

TABLE 47

SHOWING THE INFLUENCE OF PRECEDING VARIABLE QUESTION  
UPON DEFINITE ANSWERS TO STANDARD SOCIAL QUESTIONS

	Objective		Subjective		Positive Objective		P.O.C.L.		Negative Objective	
	No.	%	No.	%	No.	%	No.	%	No.	%
Affirmative	673	36.4	663	36.2	704	37.7	659	36.7	729	39.3
Negative	1177	63.6	1171	63.8	1164	62.3	1134	63.3	1126	60.7
Total	1850	100.0	1834	100.0	1868	100.0	1793	100.0	1855	100.0

highest consistency resulted following the negative objective form (97.2%), while the lowest consistency (94.2%) followed the positive objective. This difference was found to be a reliable one statistically, so that it is apparent that the preceding variable has a definite effect upon the consistency of the response to the interspersed standard questions. A comparison of the order of consistency for the variable questions (Table 38) shows us that there is very little relationship between the order of consistency for the two lists. It is apparent that, although the preceding variable question does have some sort of an effect upon consistency, that effect is not simply a carryover from the preceding question, as far as consistency of response is concerned.

*Suggestibility.* Does the preceding variable question influence the response to the standard question in such a way as to indicate some influence of suggestion? Table 47 shows us that the highest proportion of affirmative responses (disregarding the "don't know"

TABLE 48

SHOWING THE DIFFERENCES AND RELIABILITIES OF THE DIFFERENCES OF THE DATA IN TABLE 47

Conditions Compared	Diff.	Sigma	CR	P
	(in %)	Diff.		
Objective-Subjective	.2	1.58	.13	55
Objective-Positive Obj.	1.3	1.58	.82	79
Objective-P.O.C.L.	.3	1.60	.19	58
Objective-Negative Obj.	2.9	1.59	1.82	96
Subjective-Positive Obj.	1.5	1.59	.94	83
Subjective-P.O.C.L.	.5	1.60	.31	62
Subjective-Negative Obj.	3.1	1.60	1.94	97
Positive Objective-P.O.C.L.	1.0	1.60	.62	73
Positive Obj.-Negative Obj.	1.6	1.59	1.01	84
P.O.C.L.-Negative Obj.	2.6	1.61	1.61	94

responses) occurs following the negative objective question form, closely followed by the positive objective. The subjective, the objective and P.O.C.L. are all about equal in the proportion of negative answers, so it would seem that these tend to be negatively influenced in terms of suggestion by the preceding variable. Now, although Table 48 shows that none of the differences are even close to being statistically reliable, it can be seen here that there is an almost inverse relationship between the variable and the standard immediately following, in terms of the suggestion influence. For example, the negative objective form causes a negative suggestion (the greatest) for its own results, while the persons then tend to respond in a positive direction (the greatest) on the subsequent question. In the variable itself, the P.O.C.L. is the second question in order of negative influence, while in the immediately subsequent response, it is third. The objective, which is approximately the neutral point in the original effect, is evidently causing a negative response in the subsequent question. The positive objective, slightly positively suggestive as far as its own results are concerned, causes a slightly negative response to the subsequent question, while the subjective question, most positively suggestive as far as its own results are concerned, is most negatively suggestive in the subsequent question.

It looks as though there is some sort of reaction of the person

TABLE 49

SHOWING THE INFLUENCE OF PRECEDING VARIABLE QUESTION  
UPON ANSWERS TO STANDARD SOCIAL QUESTIONS

	Objective		Subjective		Positive Objective		P.O.C.L.		Negative Objective	
	No.	%	No.	%	No.	%	No.	%	No.	%
Affirmative	673	28.1	663	27.6	704	29.3	659	27.5	729	30.4
Negative	1177	49.0	1191	49.6	1164	48.5	1134	47.2	1126	46.9
Don't Know	550	22.9	546	22.8	532	22.2	607	25.3	545	22.7
Total	2400	100.0	2400	100.0	2400	100.0	2400	100.0	2400	100.0

TABLE 50

SHOWING THE GREATEST DIFFERENCES IN TABLE 49 AND  
THE RELIABILITIES OF THESE DIFFERENCES

Conditions Compared	Diff. (in %)	Sigma Diff.	CR	P
Affirmative:				
P.O.C.L.-Negative Obj.	2.9	1.31	2.21	99
Negative:				
Subjective-Negative Obj.	2.7	1.44	1.87	97
Don't Know:				
P.O.C.L.-Positive Obj.	3.1	1.23	2.52	99

interviewed to swing in the opposite direction following a question where a response was suggested to him.

*Indecision.* Table 49 shows the proportion of "don't know" responses for the standard questions, according to which variable form they follow. Even although the greatest difference (between the P.O.C.L. and the positive objective) is unreliable statistically (Table 50), the order of indecision is still interesting. The subjective shows the greatest proportion of indecision, while the positive objective shows least. The positive objective also showed least indecision in the actual variable itself, it will be recalled, while the subjective was very close to the highest in the proportion of "don't know" responses. Although the agreement is by no means perfect, there would seem to be some indication that the proportion of "don't know" responses to a standard question is influenced by the proportion of "don't know" responses given on the preceding



variable. It is considered fact in poll research that a "don't know" response to one question can cause a tendency for a similar response to a following question.

#### IV. DISCUSSION AND CONCLUSIONS

The first problem that will be taken up in this discussion is that of attempting to determine which of the five question forms used is the best form in terms of the four criteria considered. It has already been pointed out that the objective form was superior to all other forms in predictive validity, although it was lowest in consistency and showed the highest proportion of indecision. It was concluded from the 99.0% validity that there was practically no suggestion operating in the objective form of question.

Since the objective form has the highest validity (and validity is the most important of the four criteria considered) and little or no suggestibility, even though the form has lowest consistency and highest indecision, it must be concluded that the objective form is the best wording that we have used in this particular situation. Not only are consistency and indecision the least important of the criteria that have been considered, but actually, in terms of practical application, the differences within these criteria have little significance for the size of differences secured. For example, referring again to Table 40, there is very little practical difference between the consistency of 93.2% and 97.1%, the range secured. Certainly, in a public opinion poll, all questions having a consistency within this range (for the number of cases we used) would be equally acceptable. If a difference of some 10% had resulted in consistency, the criterion would have been a more differentiating one.

Practically the same thing is true in the case of the criterion of indecision. Table 44 indicates that the range of "don't know" answers is 24.2% to 29.3%. Although many of the differences were reliable statistically, such a small range has little practical significance. Again, any question producing "don't know" responses within such a small range would be equally useful for a public opinion poll. If differences of some 20% had resulted in this criterion, then indecision would have been extremely useful insofar as its practical application is concerned.



Thus the evaluation of the question forms must rest primarily upon the validity and indecision criteria. The objective is more valid and less suggestive than any other form. The negative objective is next in order of validity (92.8%) although it shows the greatest deviation from the zero point of suggestion (5.7%), and this in a negative direction.<sup>27</sup>

The P.O.C.L. had the next highest validity (89.8%) although it showed next highest deviation from the zero point (2.2%) in suggestion, being suggestive in a negative direction. The positive objective was the fourth most valid form of question (87.4%), despite the fact that it showed least deviation from the zero point of suggestion (.1%) in a positive direction. The least valid form of question, the subjective (85.0%), was slightly suggestive in the affirmative direction (1.5%).

This definitely indicates that the objective form was the best of the five forms used in this particular situation. It is somewhat difficult to rank definitely the other forms in an order of "goodness," but there seems to be little point in doing this at any rate, since the objective form turned out to be so superior.

Although the influence of the preceding variable upon the interspersed standard question was not one of the primary purposes of the study, the results secured here were very enlightening, and indicate definite possibilities for further study. Of course no measure of validity was available here, so it was impossible to determine any effect upon validity which the variables might have caused. But, since it has already been shown that there is a relationship between validity and suggestion, it would appear fairly likely that the middle point in the suggestion list would indicate the highest validity.

From Table 47 it can be seen that the P.O.C.L. form of the preceding variable apparently induces least suggestion upon the subsequent standard question, and, since the relation between suggestion and validity is close, it appears that this may be the most valid result. This table also indicates that the standard question

<sup>27</sup> It will be recalled that the validation measure was computed for only one question, while the suggestion computation involved use of all variable question results. It has been shown that where validation is possible, suggestion influence is directly and inversely related to it.

shows a positive suggestion influence when preceded by the positive objective and the negative objective, while some sort of negative suggestion influence results when the preceding variable form is the objective or subjective. Of course, none of the differences (as shown in Table 48) were statistically reliable, but the *order* of the influences of the preceding variables seemed to be reasonable, since there was generally an inverse relationship between the directions of suggestion in the variable and the immediately following standard question.

Although some of the differences were statistically reliable, the order of consistency for the standard questions when classified according to the variable they followed, was not believed to have any practical significance, and did not appear to have any relationship to the consistencies of the variable questions. On the other hand, although none of the differences of the indecision figures were statistically reliable, the order was interesting because it corresponded roughly to the order of indecision for the variable questions.

The conclusions that might be drawn on the basis of the present study, with the limitation that all of these conclusions are not meant to be generalizations, but are applied only to the population and issues studied, are as follows:

1. In terms of the four criteria—validity, consistency, suggestion, and indecision—results of the variable questions were found to be influenced by the wording.<sup>28</sup>

2. The objective variable question was found to be the most valid; it was reliably different from all of the other forms. Next most valid was the negative objective, which was reliably different from two of the other four question forms. The P.O.C.L., the positive objective and the subjective followed in that order; however, none of the last three were reliably different from one another.

3. For consistency, the order of question forms was found to be: highest, P.O.C.L.; then the positive objective, the subjective, the negative objective; and lowest, objective. Although six of the ten differences were reliable statistically, it was concluded that these differences were not large enough to be of practical value in determining which question form to use in a public opinion poll.

4. The objective form was found to contain least suggestion. The sub-

<sup>28</sup> These criteria are defined in preceding chapters.

jective and positive objective forms were found to be positively suggestive, while the negative objective and the P.O.C.L. were found to be negatively suggestive. But only two of the ten differences were statistically reliable.

5. The objective question form produced the greatest indecision, followed by the subjective, the P.O.C.L., the negative objective and the positive objective. Although three of the ten differences were reliable statistically, the variations were so small that they would be of no value in determining which question form would be best in these terms for a public opinion poll.

6. As a result of the preceding conclusions, it was decided that in the present study, validity and suggestion criteria were the most valuable. In these terms the objective proved to be best in this study, although the order of goodness for the other questions is not clear.

7. The variable questions were found to influence the immediately subsequent standard questions in terms of consistency, suggestion, and indecision.

8. Although none of the differences secured were reliable, the P.O.C.L. variable apparently induced least suggestion upon the immediately following standard question, since this was the middle item in the suggestion table. The positive objective and negative objective caused a positive suggestion influence upon the immediately following standard question, while the objective and subjective forms were followed by a negative suggestion influence. In general, the direction of the variable influence induced suggestion in the opposite direction upon the immediately following standard question.

9. Highest consistency in the standard questions followed the negative objective variable, while the lowest consistency followed the positive objective form. Though this difference is reliable statistically, the result was believed to have little practical significance because of its small size.

10. Differences in indecision for standard questions classed according to which variable form they followed proved to be unreliable statistically, although they showed a rough inclination to follow the order of consistency for the preceding variable question.

These results should be pertinent for the makers of the nationwide public opinion poll. The study certainly indicates that the wording of the question has an influence on the results secured; however, much experimentation on this point will be required before any extent of generalization can follow. It may even be that the effect will vary with the type of subject matter used.

Now what does our study indicate as far as public opinion survey generalizations are concerned? Let us first point out certain limitations of the study which might very well prevent generaliza-

tion. In the first place, the sample of people on which the survey was conducted was a highly selected one, being from only one town—Irvington, N. J. What is true of these people might not be true of the population at large, although there is no evidence to show that they are peculiar in terms of any characteristic. Whatever the shortcomings of such a limited sample may be, the advantages it offered in this study were certainly many. For example, it was relatively simple to control most of the elements of the study. The writer could personally instruct interviewers, rather than having them handled through an intermediary. Moreover, the sampling controls could be rigidly exercised, since the writer, himself, was in personal charge. Since the influences of variable questions may vary with different types of persons, the very homogeneity of the group studied made us reasonably sure before the study was made that any results secured would not be canceled out because of great differences in the nature of the sample. And of course in working with this one relatively homogeneous group, we were on much safer ground in showing that our five basic groups were comparable, than we would have been if the five basic groups had been selected in terms of a nationwide study.

But this limited sampling must make us cautious in terms of generalization, nevertheless. Even though the number of cases is entirely adequate (and indeed considerably larger than is true with most psychological investigations) for all of the analyses made, this fact does not allow wide generalizations.

Another limitation of the study was that of necessity a large range of subject matters in the questions could not be included. This means that again caution is necessary in terms of generalizing for all subject matters used in public opinion polls. The study is further limited in that only one question—horseracing and parimutuel betting issue—could be validated. And only five variable question forms were used in this study, while even greater differences might result when some other variations were introduced.

Despite all of these limitations, however, the study is enlightening. It seems highly likely that the best form of a particular question may vary according to the subject matter of the question, the time it is used, the population on which it is used, and the general resemblance it has to the issue as it is commonly described (in

propaganda, a proposed vote, or from word of mouth).<sup>29</sup>

It would also seem likely that any influence of suggestion in the long run would be greatest when the proportion of "don't know" responses was found to be high on a particular issue, since there would be more undecided people available for suggestion. Unfortunately we have neither the type nor the volume of evidence available to settle this issue. Suggestion would also presumably be greatest when public opinion was rather evenly divided on the issue at hand, and the influence of suggestion would likely decrease when the sentiment was quite strong in one direction or the other. It would seem, then, that the question form (as far as suggestion is concerned) would matter least when public opinion was very definitely crystallized on a subject, whereas when there was an equal division of opinion, the form would be most important.

For example, when public opinion is so definitely crystallized as on the subject of who is in the right in the European war, the question form would probably matter little, if at all.

What, finally, can be said about the implications of the present study? Much more valuable than an attempt to generalize would be a suggestion for further research, on the influence of the question form both in terms of its own results and results of subsequently used question forms. A study conducted on a similar basis in another community would shed light on whether the same general findings would hold true with another population. A study in the same town would determine whether or not the findings were to hold true on different issues, and we would also have information on the extent of the influence with questions where opinion was heavily and little crystallized. Still another interesting problem suggested by this study is to determine the relationship between the present method of determining consistency, and the follow-up method. Along with this problem is an even more important one—the determination of whether the contention put forth on the

<sup>29</sup> It would have been interesting to vary the wording of the horseracing issue from a distinctly different to a very similar wording as used in the proposed amendment, except that the wording of the amendment was so complicated and long that this would have been impossible. If it could have been done, the most similar form of the question would presumably have been found to be most valid in terms of the method used.

basis of the present study, that the formula for a standard error of a percentage (when applied to questionnaire results) varies according to the question form and content, as well as with the size of the sample, is a valid one.

The one thing that this study definitely indicates is the need for further research.

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TABLE 1

SHOWING THE DIFFERENCES AND RELIABILITIES OF THE  
DIFFERENCES FOR THE DATA OF QUESTION TWO AS  
GATHERED FROM ENTIRE SAMPLE OF PERSONS

Conditions Compared	Type Answer	Diff. (in %)	Sigma Diff.	CR	P
Objective-Subjective	Affirmative	6.0	2.65	2.26	99
Objective-Positive Obj.	Affirmative	11.0	2.69	4.09	100
Objective-P.O.C.L.	Affirmative	3.4	2.62	1.30	90
Objective-Negative Obj.	Affirmative	6.9	2.66	2.59	99
Subjective-Positive Obj.	Affirmative	5.0	2.76	1.81	96
Subjective-P.O.C.L.	Affirmative	2.6	2.69	.97	83
Subjective-Negative Obj.	Affirmative	.9	2.73	.33	63
Positive Obj.-P.O.C.L.	Affirmative	7.6	2.74	2.77	99
Positive Obj.-Negative Obj.	Affirmative	4.1	2.77	1.48	93
P.O.C.L.-Negative Obj.	Affirmative	3.5	2.70	1.30	90
Objective-Subjective	Negative	2.8	2.70	1.04	85
Objective-Positive Obj.	Negative	2.3	2.71	.85	80
Objective-P.O.C.L.	Negative	2.2	2.75	.80	79
Objective-Negative Obj.	Negative	.5	2.74	.18	57
Subjective-Positive Obj.	Negative	.5	2.77	.18	57
Subjective-P.O.C.L.	Negative	5.0	2.72	1.84	96
Subjective-Negative Obj.	Negative	3.3	2.71	1.22	88
Positive Obj.-P.O.C.L.	Negative	4.5	2.73	1.65	95
Positive Obj.-Negative Obj.	Negative	2.8	2.71	1.03	85
P.O.C.L.-Negative Obj.	Negative	1.7	2.76	.62	73
Objective Subjective	Don't Know	2.8	2.70	1.04	85
Objective-Positive Obj.	Don't Know	2.3	2.71	.85	80
Objective-P.O.C.L.	Don't Know	2.2	2.75	.80	79
Objective-Negative Obj.	Don't Know	.5	2.74	.18	57
Subjective-Positive Obj.	Don't Know	.5	2.77	.18	57
Subjective-P.O.C.L.	Don't Know	2.7	2.74	.99	84
Subjective-Negative Obj.	Don't Know	4.2	2.72	1.54	93
Positive Obj.-P.O.C.L.	Don't Know	3.2	2.68	1.19	88
Positive Obj.-Negative Obj.	Don't Know	1.7	2.66	.64	74
P.O.C.L.-Negative Obj.	Don't Know	1.5	2.70	.56	71



TABLE 2

SHOWING THE DIFFERENCES AND RELIABILITIES OF THE  
DIFFERENCES FOR THE DATA OF QUESTION FOUR AS  
GATHERED FROM ENTIRE SAMPLE OF PERSONS

Conditions Compared	Type Answer	Diff. (in %)	Sigma Diff.	CR	P
Objective-Subjective	Affirmative	3.7	2.63	1.41	92
Objective-Positive Obj.	Affirmative	1.2	2.67	.45	67
Objective-P.O.C.L.	Affirmative	.8	2.69	.30	62
Objective-Negative Obj.	Affirmative	4.5	2.73	1.65	95
Subjective-Positive Obj.	Affirmative	2.5	2.62	.95	83
Subjective-P.O.C.L.	Affirmative	4.5	2.64	1.70	96
Subjective-Negative Obj.	Affirmative	8.2	2.68	3.06	100
Positive Obj.-P.O.C.L.	Affirmative	2.0	2.68	.75	77
Positive Obj.-Negative Obj.	Affirmative	5.7	2.71	2.10	98
P.O.C.L.-Negative Obj.	Affirmative	3.7	2.74	1.35	91
Objective-Subjective	Negative	1.5	1.42	1.06	85
Objective-Positive Obj.	Negative	3.1	1.63	1.90	97
Objective-P.O.C.L.	Negative	1.6	1.57	1.02	84
Objective-Negative Obj.	Negative	10.0	1.87	5.35	100
Subjective-Positive Obj.	Negative	4.6	1.56	2.95	99
Subjective-P.O.C.L.	Negative	3.1	1.49	2.08	98
Subjective-Negative Obj.	Negative	11.5	1.81	6.35	100
Positive Obj.-P.O.C.L.	Negative	1.5	1.70	.88	81
Positive Obj.-Negative Obj.	Negative	6.9	1.98	3.48	100
P.O.C.L.-Negative Obj.	Negative	8.4	1.93	4.35	100
Objective-Subjective	Don't Know	2.1	2.44	.86	80
Objective-Positive Obj.	Don't Know	4.3	2.39	1.80	96
Objective-P.O.C.L.	Don't Know	.8	2.46	.33	63
Objective-Negative Obj.	Don't Know	5.5	2.37	2.32	99
Subjective-Positive Obj.	Don't Know	2.2	2.35	.94	83
Subjective-P.O.C.L.	Don't Know	1.3	2.42	.54	71
Subjective-Negative Obj.	Don't Know	3.4	2.33	1.46	93
Positive Obj.-P.O.C.L.	Don't Know	3.5	2.38	1.47	93
Positive Obj.-Negative Obj.	Don't Know	1.2	2.28	.53	70
P.O.C.L.-Negative Obj.	Don't Know	4.7	2.35	2.00	98

TABLE 3

SHOWING THE DIFFERENCES AND RELIABILITIES OF THE  
DIFFERENCES FOR THE DATA OF QUESTION SIX AS  
GATHERED FROM ENTIRE SAMPLE OF PERSONS

Conditions Compared	Type Answer	Diff. (in %)	Sigma Diff.	CR	P
Objective-Subjective	Affirmative	3.9	2.85	1.37	91
Objective-Positive Obj.	Affirmative	1.5	2.84	.53	70
Objective-P.O.C.L.	Affirmative	.8	2.83	.28	61
Objective-Negative Obj.	Affirmative	1.9	2.85	.67	75
Subjective-Positive Obj.	Affirmative	2.4	2.86	.84	80
Subjective-P.O.C.L.	Affirmative	4.7	2.84	1.65	95
Subjective-Negative Obj.	Affirmative	2.0	2.86	.70	76
Positive Obj.-P.O.C.L.	Affirmative	2.3	2.84	.81	79
Positive Obj.-Negative Obj.	Affirmative	.4	2.85	.14	56
P.O.C.L.-Negative Obj.	Affirmative	2.7	2.84	.95	83
Objective-Subjective	Negative	1.1	2.76	.40	65
Objective-Positive Obj.	Negative	.4	2.77	.14	56
Objective-P.O.C.L.	Negative	5.5	2.81	1.96	98
Objective-Negative Obj.	Negative	1.5	2.78	.54	71
Subjective-Positive Obj.	Negative	1.5	2.76	.54	71
Subjective-P.O.C.L.	Negative	6.6	2.80	2.36	99
Subjective Negative Obj.	Negative	2.6	2.77	.94	83
Positive Obj.-P.O.C.L.	Negative	5.1	2.81	1.81	96
Positive Obj.-Negative Obj.	Negative	1.1	2.78	.40	65
P.O.C.L.-Negative Obj.	Negative	4.0	2.82	1.42	92
Objective-Subjective	Don't Know	2.6	2.39	1.09	86
Objective-Positive Obj.	Don't Know	1.8	2.41	.75	77
Objective-P.O.C.L.	Don't Know	4.6	2.35	1.96	98
Objective-Negative Obj.	Don't Know	3.3	2.38	1.39	92
Subjective-Positive Obj.	Don't Know	.8	2.36	.34	64
Subjective-P.O.C.L.	Don't Know	2.0	2.30	.85	80
Subjective-Negative Obj.	Don't Know	.7	2.32	.30	62
Positive Obj.-P.O.C.L.	Don't Know	2.8	2.31	1.21	88
Positive Obj.-Negative Obj.	Don't Know	1.5	2.34	.64	74
P.O.C.L.-Negative Obj.	Don't Know	1.3	2.28	.57	72

TABLE 4

SHOWING THE DIFFERENCES AND RELIABILITIES OF THE  
DIFFERENCES FOR THE DATA OF QUESTION EIGHT AS  
GATHERED FROM THE ENTIRE SAMPLE OF PERSONS

Conditions Compared	Type Answer	Diff. (in %)	Sigma Diff.	CR	P
Objective-Subjective	Affirmative	8.1	2.87	2.82	100
Objective-Positive Obj.	Affirmative	4.7	2.83	1.66	95
Objective-P.O.C.L.	Affirmative	5.5	2.87	1.92	97
Objective-Negative Obj.	Affirmative	20.0	2.82	7.09	100
Subjective-Positive Obj.	Affirmative	12.8	2.85	4.49	100
Subjective-P.O.C.L.	Affirmative	2.6	2.89	.90	82
Subjective-Negative Obj.	Affirmative	11.9	2.84	4.19	100
Positive Obj.-P.O.C.L.	Affirmative	10.2	2.85	3.58	100
Positive Obj.-Negative Obj.	Affirmative	24.7	2.80	8.82	100
P.O.C.L.-Negative Obj.	Affirmative	14.5	2.84	5.11	100
Objective-Subjective	Negative	1.7	1.60	1.06	85
Objective-Positive Obj.	Negative	6.0	1.76	3.41	100
Objective-P.O.C.L.	Negative	3.9	1.69	2.31	99
Objective-Negative Obj.	Negative	16.7	2.04	8.19	100
Subjective-Positive Obj.	Negative	4.3	1.92	2.24	99
Subjective-P.O.C.L.	Negative	2.2	1.85	1.19	88
Subjective-Negative Obj.	Negative	15.0	2.18	6.88	100
Positive Obj.-P.O.C.L.	Negative	2.1	1.99	1.06	85
Positive Obj.-Negative Obj.	Negative	10.7	2.30	4.65	100
P.O.C.L.-Negative Obj.	Negative	12.8	2.24	5.71	100
Objective-Subjective	Don't Know	6.5	2.79	2.33	99
Objective-Positive Obj.	Don't Know	10.6	2.60	4.08	100
Objective-P.O.C.L.	Don't Know	1.7	2.78	.61	73
Objective Negative Obj.	Don't Know	3.4	2.77	1.23	89
Subjective-Positive Obj.	Don't Know	17.1	2.65	6.45	100
Subjective-P.O.C.L.	Don't Know	4.8	2.80	1.71	96
Subjective-Negative Obj.	Don't Know	3.1	2.82	1.10	86
Positive Obj.-P.O.C.L.	Don't Know	12.3	2.62	4.69	100
Positive Obj.-Negative Obj.	Don't Know	14.0	2.63	5.32	100
P.O.C.L.-Negative Obj.	Don't Know	1.7	2.78	.61	73

TABLE 5

SHOWING THE DIFFERENCES AND RELIABILITIES OF THE  
DIFFERENCES FOR THE DATA OF QUESTION TEN AS  
GATHERED FROM THE ENTIRE SAMPLE OF PERSONS

Conditions Compared	Type Answer	Diff. (in %)	Sigma Diff.	CR	P
Objective-Subjective	Affirmative	1.0	2.88	.35	64
Objective-Positive Obj.	Affirmative	.8	2.88	.28	61
Objective-P.O.C.L.	Affirmative	1.0	2.88	.35	64
Objective-Negative Obj.	Affirmative	4.0	2.88	1.39	92
Subjective-Positive Obj.	Affirmative	1.8	2.88	.63	74
Subjective-P.O.C.L.	Affirmative	2.0	2.88	.69	76
Subjective-Negative Obj.	Affirmative	3.0	2.89	1.04	85
Positive Obj.-P.O.C.L.	Affirmative	.2	2.88	.07	53
Positive Obj.-Negative Obj.	Affirmative	4.8	2.88	1.67	96
P.O.C.L.-Negative Obj.	Affirmative	5.0	2.88	1.74	96
Objective-Subjective	Negative	1.0	2.56	.39	65
Objective-Positive Obj.	Negative	.7	2.70	.26	60
Objective-P.O.C.L.	Negative	3.6	2.51	1.43	93
Objective-Negative Obj.	Negative	2.7	2.52	1.07	85
Subjective-Positive Obj.	Negative	1.7	2.68	.63	74
Subjective-P.O.C.L.	Negative	2.6	2.50	1.04	85
Subjective-Negative Obj.	Negative	2.3	2.50	.92	82
Positive Obj.-P.O.C.L.	Negative	4.3	2.64	1.63	94
Positive Obj.-Negative Obj.	Negative	4.0	2.53	1.58	94
P.O.C.L.-Negative Obj.	Negative	.3	2.46	.12	55
Objective-Subjective	Don't Know	.0	2.53	.00	50
Objective-Positive Obj.	Don't Know	.2	2.53	.08	53
Objective-P.O.C.L.	Don't Know	4.7	2.59	1.81	96
Objective-Negative Obj.	Don't Know	.6	2.52	.24	60
Subjective-Positive Obj.	Don't Know	.2	2.53	.08	53
Subjective-P.O.C.L.	Don't Know	4.7	2.59	1.81	96
Subjective-Negative Obj.	Don't Know	.6	2.52	.24	60
Positive Obj.-P.O.C.L.	Don't Know	3.5	2.60	1.35	91
Positive Obj.-Negative Obj.	Don't Know	.8	2.52	.32	63
P.O.C.L.-Negative Obj.	Don't Know	4.3	2.58	1.67	95

TABLE 6

SHOWING THE DIFFERENCES AND THE RELIABILITIES  
OF THE DIFFERENCES FOR THE ANSWERS TO THE  
HORSERACING VARIABLE QUESTION AMONG  
FIVE SAMPLES OF VOTERS

Conditions Compared	Type Answer	Diff. (in %)	Sigma Diff.	CR	P
Objective-Subjective	Affirmative	9.7	3.78	2.57	99
Objective-Positive Obj.	Affirmative	7.2	3.81	1.89	97
Objective-P.O.C.L.	Affirmative	3.1	3.68	.84	80
Objective-Negative Obj.	Affirmative	5.5	3.82	1.44	93
Subjective-Positive Obj.	Affirmative	2.5	3.83	1.89	97
Subjective-P.O.C.L.	Affirmative	12.8	3.70	3.46	100
Subjective-Negative Obj.	Affirmative	4.2	3.84	1.09	86
Positive Obj.-P.O.C.L.	Affirmative	10.3	3.73	2.76	99
Positive Obj.-Negative Obj.	Affirmative	1.7	3.87	.44	67
P.O.C.L.-Negative Obj.	Affirmative	8.6	3.74	2.30	99
Objective-Subjective	Negative	4.7	3.73	1.26	89
Objective-Positive Obj.	Negative	4.6	3.76	1.22	88
Objective-P.O.C.L.	Negative	3.5	3.73	.94	83
Objective-Negative Obj.	Negative	1.6	3.80	.42	66
Subjective-Positive Obj.	Negative	.1	3.72	.03	51
Subjective-P.O.C.L.	Negative	8.2	3.68	2.23	99
Subjective-Negative Obj.	Negative	3.1	3.76	.82	79
Positive-Obj.-P.O.C.L.	Negative	8.1	3.71	2.18	99
Positive Obj.-Negative Obj.	Negative	3.0	3.70	.79	79
P.O.C.L.-Negative Obj.	Negative	5.1	3.75	1.36	91
Objective-Subjective	Don't Know	5.0	2.49	2.01	98
Objective-Positive Obj.	Don't Know	2.6	2.62	.89	82
Objective-P.O.C.L.	Don't Know	.4	2.65	.15	56
Objective-Negative Obj.	Don't Know	3.9	2.57	1.52	93
Subjective-Positive Obj.	Don't Know	2.4	2.39	1.00	84
Subjective-P.O.C.L.	Don't Know	4.6	2.43	1.89	97
Subjective-Negative Obj.	Don't Know	1.1	2.31	.48	68
Positive Obj.-P.O.C.L.	Don't Know	2.2	2.56	.86	80
Positive Obj.-Negative Obj.	Don't Know	1.3	2.47	.53	70
P.O.C.L.-Negative Obj.	Don't Know	3.5	2.51	1.39	92

TABLE 7

SHOWING THE DIFFERENCES AND RELIABILITIES OF THE  
DIFFERENCES FOR THE SUMMARY OF AFFIRM-  
ATIVE AND NEGATIVE ANSWERS  
TO VARIABLE QUESTIONS

Conditions Compared	Diff. (in %)	Sigma Diff.	CR	P
Objective-Subjective	1.5	1.42	1.06	85
Objective-Positive Obj.	.1	1.41	.07	53
Objective-P.O.C.L.	2.2	1.44	1.53	93
Objective-Negative Obj.	5.7	1.45	1.40	92
Subjective-Positive Obj.	1.4	1.40	1.00	84
Subjective-P.O.C.L.	3.7	1.43	2.59	99
Subjective-Negative Obj.	7.2	1.44	5.00	100
Positive Obj.-P.O.C.L.	2.3	1.42	1.62	94
Positive Obj.-Negative Obj.	5.8	1.42	4.08	100
P.O.C.L.-Negative Obj.	3.5	1.45	2.41	99

TABLE 8

COMPARISON OF CONSISTENCIES FOR STANDARD SOCIAL  
QUESTIONS IN FIVE BASIC SAMPLES

		Identical Responses	
		No.	%
Q.1	Jap-German	1445	96.3
Q.3	Third Term	1436	95.7
Q.5	Prosperity	1426	95.1
Q.7	Cancel debts	1456	97.1
Q.9	Financial aid	1447	96.5

TABLE 9

COMPARISON OF ONE STANDARD QUESTION (Q.3) IN  
FIVE SAMPLES OF VOTERS

Q.3. Do you favor a third term for President Roosevelt?

	Sample A		Sample B		Sample C		Sample D		Sample E		CR	P
	No.	%	No.	%	No.	%	No.	%	No.	%		
Yes	97	28.9	117	31.8	105	31.7	91	26.4	110	31.7	1.59	94
No	192	57.1	207	56.2	177	53.5	204	59.4	192	55.3	1.55	93
Don't Know	47	14.0	44	12.0	49	14.8	49	14.2	45	13.0	1.08	86
Total	336	100.0	368	100.0	331	100.0	344	100.0	347	100.0		

## QUESTIONNAIRE FORMS USED

## A

- |   |                 |    |
|---|-----------------|----|
| 1. Have you refused to buy either Japanese or German goods?   | Jap ..... 1     |    |
|   | Ger ..... 2     |    |
|   | Both ..... 3    | 1  |
|   | No ..... 4      |    |
| 2. Is the present government helping or hurting business?   | Helping ..... 1 |    |
|   | Hurting ..... 2 | 2  |
|   | DK ..... 3      |    |
| 3. Do you favor a third term for President Roosevelt?   | Yes ..... 1     |    |
|   | No ..... 2      | 3  |
|   | DK ..... 3      |    |
| 4. Do you think the visit of the British King and Queen to this country is desirable or undesirable?  | Des ..... 1     |    |
|   | Und ..... 2     | 4  |
|   | DK ..... 3      |    |
| 5. Do you believe prosperity will increase before the end of 1939?                                    | Yes ..... 1     |    |
|   | No ..... 2      | 5  |
|   | DK ..... 3      |    |
| 6. Is it desirable to permit horseracing and parimutuel betting in New Jersey?                        | Yes ..... 1     |    |
|   | No ..... 2      | 6  |
|   | DK ..... 3      |    |
| 7. Should the United States cancel foreign war debts?   | Yes ..... 1     |    |
|   | No ..... 2      | 7  |
|   | DK ..... 3      |    |
| 8. Is it desirable to balance the national budget within the next four years: Yes, No, or Don't Know? | Yes ..... 1     |    |
|   | No ..... 2      | 8  |
|   | DK ..... 3      |    |
| 9. Should the United States supply financial aid to the railroads?                                    | Yes ..... 1     |    |
|   | No ..... 2      | 9  |
|   | DK ..... 3      |    |
| 10. Should the United States break off diplomatic relations with Germany?                             | Yes ..... 1     |    |
|   | No ..... 2      | 10 |
|   | DK ..... 3      |    |
| 11. Do you or your family own an automobile?  | Yes ..... 1     |    |
|   | No ..... 2      | 11 |

12. Do you or your family have an auto- matic refrigerator?	Yes .....	1	
	No .....	2	12
13. Do you have your <i>own</i> telephone?	Yes .....	1	
	No .....	2	13
14. Are you a registered voter?	Yes .....	1	
	No .....	2	14
15. (If 'yes' to Q.14) Are you going to vote in the election on June 20 concerning the legalization of horseracing and parimutuel betting?	Yes .....	1	
	No .....	2	15
	DK .....	3	
16. How many other members of your fam- ily are registered voters? (enter number)	.....		16
17. What is your religion: Hebrew, Protestant, or Catholic? (If 'Protestant' in Q.17) Which Church?.....	Heb .....	1	
	Prot .....	2	
	Cath .....	3	17
	None .....	4	
18. In what country were you born?.....	.....		18
	* * * * *		
Race: 1) White..... 2) Black..... 3) Brown.....	.....		
4) Yellow..... 5) Indian.....	.....		19
Enter by approximate age: Man..... Woman.....	.....		20
Type house: 1 family.....; 2 family (lower..... upper.....); Apt. No.....	.....		21
Hour of interview..... Date.....	.....		22
Street and Number .....	.....		23
Ward No. .... District No. ....	.....		
Inter's Init. ....	.....		24
Econ. Group: A..... B..... C..... D.....	.....		25
Name .....	.....		26
	.....		27
	1		28
	.....		29



## B

1. Have you refused to buy either Japanese or German goods?	Jap ..... 1 Ger ..... 2 Both ..... 3 No ..... 4	1
2. Do you feel that the present government is helping or hurting business?	Helping ..... 1 Hurting ..... 2 DK ..... 3	2
3. Do you favor a third term for President Roosevelt?	Yes ..... 1 No ..... 2 DK ..... 3	3
4. Is the visit of the British King and Queen to this country desirable?	Yes ..... 1 No ..... 2 DK ..... 3	4
5. Do you believe prosperity will increase before the end of 1939?	Yes ..... 1 No ..... 2 DK ..... 3	5
6. Is it desirable to permit horseracing and parimutuel betting in New Jersey: Yes, No, or Don't Know?	Yes ..... 1 No ..... 2 DK ..... 3	6
7. Should the United States cancel foreign war debts?	Yes ..... 1 No ..... 2 DK ..... 3	7
8. Is it undesirable to balance the national budget within the next four years?	Yes ..... 1 No ..... 2 DK ..... 3	8
9. Should the United States supply financial aid to the railroads?	Yes ..... 1 No ..... 2 DK ..... 3	9
10. Should the United States continue or should it break off diplomatic relations with Germany?	Continue ..... 1 Break ..... 2 DK ..... 3	10
11. Do you or your family own an automobile?	Yes ..... 1 No ..... 2	11
12. Do you or your family have an automatic refrigerator?	Yes ..... 1 No ..... 2	12

13. Do you have your <i>own</i> telephone?	Yes .....	1	
	No .....	2	13
14. Are you a registered voter?	Yes .....	1	
	No .....	2	14
15. (If 'yes' to Q.14) Are you going to vote in the election on June 20 concerning the legalization of horseracing and parimutuel betting?	Yes .....	1	
	No .....	2	15
	DK .....	3	
16. How many other members of your family are registered voters? (enter number)	.....		16
17. What is your religion: Hebrew, Protestant, or Catholic? (If 'Protestant' in Q.17) Which Church? .....	Heb .....	1	
	Prot .....	2	
	Cath .....	3	17
	None .....	4	
18. In what country were you born? .....	.....		18
* * * * *			
Race: 1) White .....	2) Black .....	3) Brown .....	
4) Yellow .....	5) Indian .....	.....	19
Enter by approximate age: Man .....	Woman .....	.....	20
Type house: 1 family ....; 2 family (lower upper ....); Apt. No. ....	.....		21
Hour of interview .....	Date .....	.....	22
Street and Number .....	.....		23
Ward No. .... District No. .... Inter's Init. ....	.....		24
Econ. Group: A .....	B .....	C .....	D .....
Name .....	.....		25
	.....		26
	.....		27
	2		28
	.....		29

## C

- |  |  |    |
|--|--|----|
| 1. Have you refused to buy either Japanese or German goods?  | Jap .....1<br>Ger .....2<br>Both .....3<br>No .....4 | 1  |
| 2. Is the present government helping business?   | Yes .....1<br>No .....2<br>DK .....3                 | 2  |
| 3. Do you favor a third term for President Roosevelt?  | Yes .....1<br>No .....2<br>DK .....3                 | 3  |
| 4. Is the visit of the British King and Queen to this country desirable: Yes, No, or Don't Know?               | Yes .....1<br>No .....2<br>DK .....3                 | 4  |
| 5. Do you believe prosperity will increase before the end of 1939?   | Yes .....1<br>No .....2<br>DK .....3                 | 5  |
| 6. Is it desirable to permit horseracing and parimutuel betting in New Jersey?                                 | Yes .....1<br>No .....2<br>DK .....3                 | 6  |
| 7. Should the United States cancel foreign war debts?  | Yes .....1<br>No .....2<br>DK .....3                 | 7  |
| 8. Is it desirable or undesirable to balance the national budget within the next four years?                   | Des .....1<br>Und .....2<br>DK .....3                | 8  |
| 9. Should the United States supply financial aid to the railroads?   | Yes .....1<br>No .....2<br>DK .....3                 | 9  |
| 10. Do you think that the United States should continue or should break off diplomatic relations with Germany? | Continue .....1<br>Break .....2<br>DK .....3         | 10 |
| 11. Do you or your family own an automobile?   | Yes .....1<br>No .....2                              | 11 |
| 12. Do you or your family have an automatic refrigerator?  | Yes .....1<br>No .....2                              | 12 |

13. Do you have your *own* telephone? Yes ..... 1  
No ..... 2 13
14. Are you a registered voter? Yes ..... 1  
No ..... 2 14
15. (If 'yes' to Q.14) Are you going to vote in the election on June 20 concerning the legalization of horseracing and parimutuel betting? Yes ..... 1  
No ..... 2 15  
DK ..... 3
16. How many other members of your family are registered voters? (enter number) ..... 16
17. What is your religion: Hebrew, Protestant, or Catholic? (If 'Protestant' in Q.17) Which Church? .....  
Heb ..... 1  
Prot ..... 2  
Cath ..... 3 17  
None ..... 4
18. In what country were you born? ..... 18
- \* \* \* \* \*
- Race: 1) White ..... 2) Black ..... 3) Brown .....  
4) Yellow ..... 5) Indian ..... 19
- Enter by approximate age: Man ..... Woman ..... 20
- Type house: 1 family .....; 2 family (lower upper.....); Apt. No. .... 21
- Hour of interview ..... Date ..... 22
- Street and Number ..... 23
- Ward No. .... District No. .... Inter's Init. .... 24
- Econ. Group: A ..... B ..... C ..... D ..... 25
- Name ..... 26  
..... 27  
3 ..... 28  
..... 29

## D

- |   |                 |    |
|---|-----------------|----|
| 1. Have you refused to buy either Japanese or German goods?                                       | Jap .....1      |    |
|   | Ger .....2      |    |
|   | Both .....3     | 1  |
|   | No .....4       |    |
| 2. Is the present government helping business: Yes, No, or Don't Know?                            | Yes .....1      |    |
|   | No .....2       | 2  |
|   | DK .....3       |    |
| 3. Do you favor a third term for President Roosevelt?   | Yes .....1      |    |
|   | No .....2       | 3  |
|   | DK .....3       |    |
| 4. Is the visit of the British King and Queen to this country undesirable?                        | Yes .....1      |    |
|   | No .....2       | 4  |
|   | DK .....3       |    |
| 5. Do you believe prosperity will increase before the end of 1939?                                | Yes .....1      |    |
|   | No .....2       | 5  |
|   | DK .....3       |    |
| 6. Is it desirable to permit or to prohibit horseracing and parimutuel betting in New Jersey?     | Permit .....1   |    |
|   | Prohibit .....2 | 6  |
|   | DK .....3       |    |
| 7. Should the United States cancel foreign war debts?   | Yes .....1      |    |
|   | No .....2       | 7  |
|   | DK .....3       |    |
| 8. Would you vote for or against the balancing of the national budget within the next four years? | For .....1      |    |
|   | Agst .....2     | 8  |
|   | DK .....3       |    |
| 9. Should the United States supply financial aid to the railroads?                                | Yes .....1      |    |
|   | No .....2       | 9  |
|   | DK .....3       |    |
| 10. Should the United States continue diplomatic relations with Germany?                          | Yes .....1      |    |
|   | No .....2       | 10 |
|   | DK .....3       |    |
| 11. Do you or your family own an automobile?  | Yes .....1      |    |
|   | No .....2       | 11 |
| 12. Do you or your family have an automatic refrigerator?   | Yes .....1      |    |
|   | No .....2       | 12 |

13. Do you have your *own* telephone? Yes .....1  
No .....2 13
14. Are you a registered voter? Yes .....1  
No .....2 14
15. (If 'yes' to Q.14) Are you going to vote  
in the election on June 20 concerning the  
legalization of horseracing and parimutuel  
betting? Yes .....1  
No .....2 15  
DK .....3
16. How many other members of your family  
are registered voters? (enter number) ..... 16
17. What is your religion: Hebrew, Protestant,  
or Catholic? (If 'Protestant' in Q.17)  
Which Church? Heb .....1  
Prot .....2  
Cath .....3 17  
None .....4
18. In what country were you born? ..... 18
- \* \* \* \* \*
- Race: 1) White ..... 2) Black ..... 3) Brown .....  
4) Yellow ..... 5) Indian ..... 19
- Enter by approximate age: Man ..... Woman ..... 20
- Type house: 1 family .....; 2 family (lower .....  
upper .....); Apt. No. .... 21
- Hour of interview ..... Date ..... 22
- Street and Number ..... 23
- Ward No. .... District No. .... Inter's  
Init. .... 24
- Econ. Group: A ..... B ..... C ..... D ..... 25
- Name ..... 26  
..... 27  
..... 28  
..... 29

## E

- |   |            |   |    |
|---|------------|---|----|
| 1. Have you refused to buy either Japanese or German goods?   | Jap .....  | 1 |    |
|   | Ger .....  | 2 |    |
|   | Both ..... | 3 | 1  |
|   | No .....   | 4 |    |
| 2. Is the present government hurting business?  | Yes .....  | 1 |    |
|   | No .....   | 2 | 2  |
|   | DK .....   | 3 |    |
| 3. Do you favor a third term for President Roosevelt?   | Yes .....  | 1 |    |
|   | No .....   | 2 | 3  |
|   | DK .....   | 3 |    |
| 4. Is the visit of the British King and Queen to this country desirable or undesirable?                     | Des .....  | 1 |    |
|   | Und .....  | 2 | 4  |
|   | DK .....   | 3 |    |
| 5. Do you believe prosperity will increase before the end of 1939?  | Yes .....  | 1 |    |
|   | No .....   | 2 | 5  |
|   | DK .....   | 3 |    |
| 6. Would you vote for or against the amendment to permit horseracing and pari-mutuel betting in New Jersey? | For .....  | 1 |    |
|   | Agst ..... | 2 | 6  |
|   | DK .....   | 3 |    |
| 7. Should the United States cancel foreign war debts?   | Yes .....  | 1 |    |
|   | No .....   | 2 | 7  |
|   | DK .....   | 3 |    |
| 8. Is it desirable to balance the national budget within the next four years?                               | Yes .....  | 1 |    |
|   | No .....   | 2 | 8  |
|   | DK .....   | 3 |    |
| 9. Should the United States supply financial aid to the railroads?  | Yes .....  | 1 |    |
|   | No .....   | 2 | 9  |
|   | DK .....   | 3 |    |
| 10. Should the United States continue diplomatic relations with Germany: Yes, No, or Don't Know?            | Yes .....  | 1 |    |
|   | No .....   | 2 | 10 |
|   | DK .....   | 3 |    |
| 11. Do you or your family own an automobile?  | Yes .....  | 1 |    |
|   | No .....   | 2 | 11 |
| 12. Do you or your family have an automatic refrigerator?   | Yes .....  | 1 |    |
|   | No .....   | 2 | 12 |

13. Do you have your *own* telephone? Yes .....1  
No .....2 13
14. Are you a registered voter? Yes .....1  
No .....2 14
15. (If 'yes' to Q.14) Are you going to vote  
in the election on June 20 concerning the  
legalization of horseracing and parimutuel  
betting? Yes .....1  
No .....2 15  
DK .....3
16. How many other members of your family  
are registered voters? (enter number) ..... 16
17. What is your religion: Hebrew, Protestant,  
or Catholic? (If 'Protestant' in Q.17)  
Which Church?..... Heb .....1  
Prot .....2 17  
Cath .....3  
None .....4
18. In what country were you born?..... 18
- \* \* \* \* \*
- Race: 1) White..... 2) Black..... 3) Brown.....  
4) Yellow..... 5) Indian..... 19
- Enter by approximate age: Man ..... Woman ..... 20
- Type house: 1 family .....; 2 family (lower .....  
upper.....); Apt. No. .... 21
- Hour of interview ..... Date ..... 22
- Street and Number ..... 23
- Ward No. .... District No. .... Inter's  
Init. .... 24
- Econ. Group: A ..... B ..... C ..... D ..... 25
- Name ..... 26
- ..... 27
- 5 28
- ..... 29



*Instruction Sheet—Irrington Study*

*Remuneration.* These interviews will be paid for at 10c per completed call, *providing* the interviewer completes his 10 full assignments. It is so important that each worker remain on the job for 10 days that the failure to do so will mean the interviews are worthless. This means that interviews must be made daily, rain or shine.

*Read These Instructions and the Questionnaires* before leaving your supervisor. This will save both of us a lot of headaches!

*Whom, When and Where to Interview.* Make interviews only in the home. It is absolutely necessary that the exact assignment given be carried out in all respects. Only persons 21 years or over are to be interviewed. In your assigned territory, call upon every fifth family, that is, skip four homes. In other words, if you are in a territory containing only 1 family houses, stop at every fifth one. If you pass a 2 family residence, that counts as two. If you are in an apartment building, stop at every fifth apartment. If you are not able to complete an interview at what would be the fifth family, get the next door neighbor; then start counting again. If you need a man, and a woman answers the door, ask for the man of the house. If no man is available, do not make the interview. The procedure may be necessary in order to obtain the proper number of interviews with persons of each sex. Do not make interviews with more than one person at a time. If two persons answer together, use the answers of the one who best helps to complete your assignment. No more than one interview is to be made in one home.

*Economic Status.* The sections and streets in which your interviews are to be made will be given to you by the supervisor. All of the interviews assigned you are to be in one economic group (note assignment). This means that if a residence in your territory does not belong to the economic group assigned you, DO NOT make any interviews there. Briefly, Class A homes are those in the very best sections, having usually 2 or more cars, 9 room house (or larger), and servants' quarters; B Class consists of 1 and some 2 family houses, some apartments, 75% owning cars; C Class includes homes of mechanics, factory workers, etc., mostly 2 family houses; D Class includes the poorest sections of the city—foreign language and colored population, tenements, persons engaged as day laborers, service work, carwashers, people on relief, etc. This is almost the slum element of the city.

*Legibility.* Please use soft black pencil and write legibly.

*Questions must be read word for word to the person interviewed, exactly as they appear upon the interview blank.* Read the entire question to the interviewee as far as the question mark. You will note that certain questions vary somewhat from form to form, so it is absolutely necessary to read all questions word for word.

*Recording the Response.* Check the proper response in the space provided in the right-hand margin.

*Name.* Wherever possible get the name of the person interviewed, either from the name on the door, or by asking. This facilitates follow-up calls.

*Explanations to Interviewees.* Do not explain the meaning of any of the questions to the person being interviewed. If the person asks for an explanation of a question, simply reread the question.

Only the questions above the dotted lines are to be asked of the person being interviewed. The remaining information is to be filled in by the interviewer without asking, simply by observation.

*Don't Know.* If the person interviewed doesn't know the answer, or refuses to answer, check "D.K." on the question.

*Follow-Up Calls.* Be sure to record the sex and age of person interviewed, type of home, street address, and all other information required at the bottom of the blank, since a number of these interviews will be made again by another interviewer as a check on accuracy.

*Rotation of Questionnaire Forms.* It is absolutely essential that you rotate the questionnaire form used. Begin with a particular questionnaire form ("A" for example), and when you have completed an interview using that form, then make the next interview on the next lettered interview ("B" for example), until you are ready to start a new series of five. Even if you go from one district to another, rotate the interview forms in unbroken order.

*Introduction Suggested.* "How do you do? We are making a little study of how people feel about certain social questions. For example" (read Q.1).

Thank you!

